



## 業績目録(小林典男)

号	1199
発行年	2012-03
URL	<a href="http://hdl.handle.net/10097/62919">http://hdl.handle.net/10097/62919</a>

# 小林典男教授業績目録

平成 24 年 3 月  
東北大学史料館  
(著作目録第 1199 号)



## 小林典男教授略歴

生年月日	昭和22年 5 月 1 日
本 籍 地	千葉県
職 名	教授
所 属	東北大学金属材料研究所

### 最終学歴

昭和41年 3 月	千葉県立佐原高等学校 卒業
昭和46年 3 月	東北大学理学部物理第二学科卒業
昭和48年 3 月	東北大学大学院理学研究科修士課程修了
昭和51年 3 月	東北大学大学院理学研究科博士課程修了

### 職 歴

昭和51年 4 月	日本学術振興会奨励研究員
昭和52年 3 月	東北大学金属研究所助手
昭和60年 1 月	東北大学金属材料研究所助教授
平成 2 年 5 月	東北大学金属材料研究所教授
平成 4 年 7 月	東北大学理学部教授（金属材料研究所併任）
平成23年 3 月	東北大学金属材料研究所教授
平成14年 4 月～20年 3 月	東北大学金属材料研究所 附属強磁場超伝導材料研究センター長（併任）
平成15年 4 月～19年 3 月	技術部長
平成16年 4 月～18年11月	東北大学金属材料研究所副研究所長（併任）
平成21年 8 月～23年 3 月	東北大学金属材料研究所本多プロフェッサー

## 学 位

昭和51年 3月 理学博士 「層状超伝導体 NbSe<sub>2</sub>の熱力学的性質の研究」

## 社会活動

平成14年 4月～15年 3月 国際超伝導産業技術研究センター 超電導応用基盤技術動向  
調査委員会 委員

平成16年 6月～18年 5月 財団法人本多記念会 評議員

平成17年 4月～19年 3月 (社) 未踏科学技術協会 超伝導科学技術研究会 幹事委員

平成18年 4月～23年 9月 東北大学出版会 評議員

平成18年 5月～20年 3月 東京大学物性研究所物質設計評価運営委員会 委員

平成18年 6月～20年 5月 財団法人本多記念会 理事

平成20年 6月～22年 5月 財団法人本多記念会 評議員

平成22年 1月～ 日本物理学会資料委員会 委員

## 学内活動

平成 5 年 4月～21年 7月	全学委員会	全学同窓会評議員
平成 8 年 4月～18年 3月	全学委員会	極低温科学センター運営委員会 委員
平成 8 年 9月～20年 3月	全学委員会	百年史編集委員会 委員
平成 8 年11月～11年 3月	全学委員会	百年史編集委員会幹事会 委員
平成11年 4月～20年 3月	全学委員会	百年史編集委員会通史専門委員会 委員
平成11年 4月～21年 3月	部局内委員会	百年史部局史編纂委員会 委員長
平成12年12月～18年 6月	全学委員会	史料館運営委員会 委員
平成13年 4月～15年 3月	部局内委員会	研究部共同利用委員会 委員長
平成14年 4月～20年 3月	部局内委員会	附属強磁場超伝導研究センター運営委員会 委員長
平成14年 4月～20年 4月	部局内委員会	附属強磁場超伝導研究センター共同利用委員会 委員長
平成15年 4月～16年 9月	全学委員会	全学教育審議会 委員
平成15年 4月～21年 3月	全学委員会	教室系技術職員研修企画委員会 委員
平成15年 4月～18年10月	部局内委員会	安全衛生管理室 室長
平成16年 1月～18年10月	部局内委員会	研究企画室 室長
平成16年 1月～17年 3月	全学委員会	学務審議会 委員
平成17年 4月～18年10月	全学委員会	教育研究評議員
平成18年 4月～20年 3月	全学委員会	研究教育基盤技術センター極低温科学センター 部会 委員
平成18年 7月～23年 3月	全学委員会	学術資源研究公開センター史料館部会 委員
平成19年 4月～23年 3月	全学委員会	学術資源研究公開センター運営委員会 委員
平成19年 4月～23年 3月	部局内委員会	テクニカルセンター運営委員会 副委員長
平成21年 4月～23年 3月	全学委員会	総合技術部運営委員会 委員
平成21年 4月～22年 9月	全学委員会	東北大学校友会代議員



## 業 績 目 録

## I. 著書・編著（共著書等含む）

1. 新実験化学講座（執筆担当部分）2. 基礎技術 1（熱伝導率）440-456.  
小林典男, 武藤芳雄（丸善, 1977）
2. セラミックスデーターブック '88（執筆担当部分）13, 超伝導セラミックスへの取り組み方.  
小林典男, 渡辺和雄, 武藤芳雄（工業製品技術協会, 1988）
3. Studies of High Temperature Superconductors（執筆担当部分）CVD Route for High  $J_c$  Superconductors, 107-144.  
K. Watanabe, H. Yamane, N. Kobayashi, T. Hirai and Y. Muto（Nova Science Publications Inc. 1992）
4. High Temperature Superconducting Electronics( 執筆担当部分 )3.2.2 Effective Pinning Centers in CVD-YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-d</sub> Films, 169-181.  
K. Watanabe, H. Yamane, N. Kobayashi, and T. Hirai (Ohmsha, Ltd, 1993)
5. 高温超伝導の科学（執筆担当部分）5-3-3 節 磁気ヒステリシスと不可逆磁場, 5-3-4 節 不可逆磁化曲線, 5-3-5 節 平衡磁化と磁化緩和, 281-299.  
小林典男（裳華房, 1999）
6. Materials Science in Static High Magnetic Fields（執筆担当部分）Vortex Phase Diagram of High- $T_c$  Superconductor YBa<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub> in High Magnetic Fields, 13-26.  
N. Kobayashi and T. Nishizaki (Springer-Verlag. 2002)
7. Materials Science in Static High Magnetic Fields 2（執筆担当部分）Flux-Pinning Properties for CVD Processed YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7</sub> Films, 41-53.  
S. Awaji, K. Watanabe, N. Kobayashi and T. Hirai (Springer-Verlag, 2002)
8. Studies of High Temperature Superconductors Vol.48( 執筆担当部分 ) 第 1 章 (Vortex Matter Physics in YBa<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub> Single Crystals) , 1 - 47.  
T. Nishizaki and N. Kobayashi (Nova Science Publishers, Inc., 2005)
9. 超伝導ハンドブック（執筆担当部分）第 3 章第 4 節（ボルテックスマターの物理）249 -264.  
福山秀敏他（朝倉書店, 2009）

## II. 研究論文

1. Flux Flow of Pure and Dirty Superconductors.  
Y. Muto, S. Shinzawa, N. Kobayashi, and K. Noto  
Proc. 13th Int. Conf. on Low Temp. Phys., (1972), 107.
2. Lattice Thermal Conductivity of Superconducting Nb-Mo and Nb-Ta Alloys below 1 K.  
M. Ikebe, N. Kobayashi, and Y. Muto  
Phys. Lett. A, 47A, (1974), 277-278.
3. Thermal Conductivity of Ta-Nb Alloys in Superconducting, Mixed, and Normal States.  
N. Kobayashi, K. Noto, M. Ikebe, and Y. Muto  
J. Low Temp. Phys., 17, (1974), 575-594.
4. Phonon Thermal Conductivity in Superconducting Ta and Ta-Nb Alloys below 1 K.  
M. Ikebe, N. Kobayashi, and Y. Muto  
J. Phys. Soc. Jpn., 37, (1974), 278.
5. Specific Heat and Strong Electron-Phonon Interaction in Layer Superconductor,  $2\text{H-NbSe}_2$ .  
N. Kobayashi, K. Noto, and Y. Muto  
Proc. 14th Int. Conf. on Low Temp. Phys., (1975), 93-96.
6. High Sensitivity Temperature Sensors at Low Temperatures.  
K. Noto, N. Kobayashi, and Y. Muto  
Jpn. J. Appl. Phys., 15, (1976), 2449-2453.
7. Thermodynamic Properties of Superconducting  $2\text{H-NbSe}_2$  Exhibiting Anisotropy and Strong-Coupling Effect.  
N. Kobayashi, K. Noto, and Y. Muto  
Solid State Commun., 20, (1976), 1081-1084.
8. Temperature and Angular Dependences of Upper Critical Fields for the Layer Structure Superconductor  $2\text{H-NbSe}_2$ .  
N. Toyota, H. Nakatsuji, K. Noto, A. Hoshi, N. Kobayashi, Y. Muto, and Y. Onodera  
J. Low Temp. Phys., 25, (1976), 485-499.

9. Thermodynamic Properties of the Layered Superconductor  $2\text{H-NbSe}_2$ .  
N. Kobayashi, K. Noto, and Y. Muto  
J. Low Temp. Phys., 27, (1977), 217-244.
10. Effect of Anisotropy and Strong Electron-Phonon Coupling in the Specific Heat of Layered  $2\text{H-NbSe}_2$ .  
K. Noto, N. Kobayashi, and Y. Muto  
Nuovo Cimento B, 38B, (1977), 511-518.
11. Specific Heat of Superconducting  $2\text{H-NbSe}_2$  Dilutely Doped with  $\text{F}_e$ .  
M. Ikebe, N. Kobayashi, S. Morohashi, H. Nakatsuji, and Y. Muto  
J. Phys. Colloq., 39, (1978), C6/878-879.
12. Anomalously Large Negative Magnetoresistance of  $1\text{T-TaS}_2$  at Ultra Low Temperatures.  
N. Kobayashi, and Y. Muto  
Solid State Commun., 30, (1979), 337-340.
13. Anomalously Large Negative Magnetoresistance of  $1\text{T-TaS}_2$  at Ultra Low Temperatures.  
N. Kobayashi, T. Sasaki, and Y. Muto  
Sci. Rep. (A), (1979), 53-56.
14. Anomalies in Ultra-High-Field Magnetic Superconductors  $(\text{Eu}_{1-x}\text{Sn}_x)\text{Mo}_6\text{S}_8$ .  
M. Isino, N. Kobayashi, and Y. Muto  
Jpn. J. Appl. Phys., 19- 3 , (1980), 389-394.
15. Magnetoresistance of  $1\text{T-Ta}_{1-x}\text{Ti}_x\text{S}_2$  near the Metal-Nonmetal Transition at Ultra Low Temperatures.  
N. Kobayashi, T. Sasaki, and Y. Muto  
J. Phys. Soc. Jpn., 48, (1980), 1870-1878.
16. Metal-Nonmetal Transition in the Layer Compound  $1\text{T-Ta}_{1-x}\text{Ti}_x\text{S}_2$ .  
N. Kobayashi, T. Sasaki, Y. Nishio, and Y. Muto  
J. Phys. Soc. Jpn., (1980), 887-890.
17. Superconducting Properties of  $4\text{Hb-Ta}_{0.8}\text{Nb}_{0.2}\text{Se}_2$ .  
M. Ikebe, N. Kobayashi, K. Katagiri, and Y. Muto  
Physica B, 105B, (1981), 435-438.



18. Thermodynamic Properties and Fundamental Parameters of Single Crystal  $\text{Cu}_{1.8}\text{Mo}_6\text{S}_8$ .  
S. Morohashi, K. Noto, N. Kobayashi, and Y. Muto  
*Physica B*, 108B, (1981), 929-930.
19. Superconductivity of  $\text{Er}(\text{Rh}_x\text{Ru}_{1-x})_4\text{B}_4$  and  $\text{Ho}(\text{Rh}_x\text{Ru}_{1-x})_4\text{B}_4$ .  
Y. Muto, H. Iwasaki, T. Sasaki, N. Kobayashi, M. Ikebe and M. Ishino  
*Ternary Superconductors*, (1981), 197-200.
20. Superconducting Eu-Rich Chevrel Phase Compound in High Magnetic Field.  
M. Isino, N. Kobayashi, and Y. Muto  
*Ternary Superconductors*, (1981), 95-98.
21. Thermal Relaxation Calorimetry under High Magnetic Fields in the Range 2 -15 K.  
K. Noto, S. Morohashi, and N. Kobayashi  
*Jpn. J. Appl. Phys.*, 21, (1982), 965.
22. Phonon Softening Effect on Specific Heat of Single Crystal  $\text{Mo}_6\text{Se}_8$ .  
N. Kobayashi, S. Higuchi, and Y. Muto  
*Proc. Int. Conf. Superconductivity in d-and f-Band Metals*, (1982), 173-178.
23. Anomalous Magnetoresistance of Speer Carbon Resistors at Low Temperatures.  
Y. Koike, S. Morita, T. Fukase, N. Kobayashi, M. Okamura, and N. Mikoshiba  
*J. Phys. Soc. Jpn.*, 52, (1983), 1111-1114.
24. Magnetoresistance of  $\text{Sc}_3\text{In}$ .  
K. Ikeda, K. A. Jr. Gschneidner, N. Kobayashi, and K. Noto  
*J. Magn. Magn. Mat.*, 42, (1984), 1 -11.
25. Specific Heat of  $1\text{T-Ta}_{0.93}\text{Ti}_{0.07}\text{S}_2$  in the Anderson Localized States.  
Y. Nishio, N. Kobayashi, and Y. Muto  
*Solid State Commun.*, 50, (1984), 781-784.
26. Excess Specific Heat in the Anderson Localized States Observed in the  $1\text{T-Ta}_{1-x}\text{Ti}_x\text{S}_2$  System.  
Y. Nishio, N. Kobayashi, and Y. Muto  
*J. Phys. Soc. Jpn.*, 53, (1984), 270-278.
27. Specific Heat of Superconducting  $\text{Nb}_{0.21}\text{Ti}_{0.79}$  Alloy.  
T. Sasaki, K. Noto, N. Kobayashi, and Y. Muto  
*Proc. 17th Int. Conf. on Low Temp. Phys.*, vol. 2 , (1984), 1295-1296.

28. Low Temperature Specific Heat of Chevrel Phase Compound  $\text{AgMo}_6\text{S}_8$ .  
M. Furuyama, N. Kobayashi, K. Noto, and Y. Muto  
Proc. 17th Int. Conf. on Low Temp. Phys., vol.1, (1984), 339-340.
29. Schottky-Like Specific Heat of  $1\text{T-Ta}_{1-x}\text{Ti}_x\text{S}_2$  in the Anderson Localized States.  
N. Kobayashi, Y. Nishio, and Y. Muto  
Proc. 17th Int. Conf. on Low Temp. Phys., vol.2, (1984), 895-896.
30. Superconducting in Cubic and Tetragonal Phases of  $(\text{La}_{1-y}\text{M}_y)_3\text{S}_4$  with  $\text{M}=\text{VACANCY}, \text{Sc}, \text{Y}, \text{Ce}, \text{Lu}, \text{Th}$ .  
M. Ikeda, A. Chiba, K.A.Gschneidner, JR., Y.-C.S. Yeh, B. J Beaudry N. Kobayashi, and K. Noto  
Physica, 135B, (1985), 391-393.
31. Critical Current Density in Superconducting  $\text{Nb}_3\text{Ge}$  and  $\text{NbN}$  Films at Fields up to 30T.  
M. Suzuki, T. Anayama, K. Watanabe, N. Toyota, N. Kobayashi, K. Noto, and Y. Muto  
Jpn. J. Appl. Phys., 24 ( 9 ), (1985), L767-L769.
32. Magnetic and Superconducting Properties of the Cubic Perovskite  $\text{YRh}_3\text{B}$ .  
H. Takei, N. Kobayashi, H. Yamauchi, T. Shishido, and T. Fukase  
J. Less-Common Met., 125, (1986), 233-237.
33. Growth and Superconducting Property of  $\text{HoMo}_6\text{S}_8$  Single Crystals.  
S. Hosoya, H. Takei, Y. Koike, N. Kobayashi, and Y. Muto  
Jpn. J. Appl. Phys., 25, (1986), 279-280.
34. Design and Performance of Remote Controlled  $^3\text{He}$  Refrigerator in a Hybrid Magnet.  
Y. Koike, T. Fukase, N. Kobayashi, S. Goto, and H. Hashiura  
Sci. Rep. Res. Inst. Tohoku. Univ.Ser.A, 33, (1986), 360-368.
35. Quenched Superconductivity by Rapid Cooling Down to Low Temperatures below  $T_{c2}$  in Single-Crystal  $\text{HoMo}_6\text{S}_8$ .  
Y. Koike, T. Fukase, N. Kobayashi, S. Hosoya, and H. Takei  
Solid State Commun., 60, (1986), 771-775.
36. Superconducting Properties in  $\text{Mo}_6\text{Se}_{8-x}\text{S}_x$ .  
M. Furuyama, N. Kobayashi, K. Noto, and Y. Muto  
Jpn. J. Appl. Phys., 26, (1987), 969-970.

37. Crystallochemical Studies on the High Temperature Superconductors  $\text{La}_{2-x}\text{M}_x\text{CuO}_{4-y}$  ( $\text{M}=\text{Ba}$  and  $\text{Sr}$ ).  
K. Oh-ishi, M. Kikuchi, Y. Syono, K. Hiraga, and Y. Morioka  
*Jpn. J. Appl. Phys.*, 26 ( 4 ), (1987), L484-L487.
38. Metastable Superconductivity below  $T_{c2}$  in Single-Crystal  $\text{HoMo}_6\text{S}_8$ .  
Y. Koike, T. Fukase, N. Kobayashi, S. Hosoya, and H. Takei  
*Physica B*, 148B, (1987), 106-112.
39. Magnetic Field Induced Superconductors,  $\text{Eu}_{0.8}\text{Sn}_{0.2}\text{Mo}_6\text{S}_{7-y}\text{Se}_y$ .  
S. Kawamata, N. Kobayashi, M. Ikebe, and Y. Muto  
*Physica B*, 148B, (1987), 130-132.
40. Effects of the Low-Lying Phonons in Chevrel Phase Compounds  $\text{Mo}_6\text{Se}_{8-x}\text{S}_x$ .  
M. Furuyama, N. Kobayashi, K. Noto, and Y. Muto  
*Physica B*, 148B, (1987), 145-148.
41. Crystallochemical Aspect of High Temperature Superconducting Oxides.  
Y. Syono, M. Kikuchi, K. Oh-ishi, A. Tokiwa, K. Kusaba, K. Hiraga, T. Kajitani,  
D. Shindo, H. Yamauchi, Y. Morioka, H. Arai, K. Nagase, N. Kobayashi,  
T. Sasaoka, and Y. Muto  
*Physica B*, 148B, (1987), 218-223.
42. Critical Current Density in High- $T_c$   $\text{Y}_{1-x}\text{Ln}_x\text{Ba}_2\text{Cu}_3\text{O}_{7-\delta}$  System.  
K. Noto, H. Morita, K. Watanabe, T. Murakami, Y. Koyanagi, I. Yoshii, I. Sato,  
H. Sugawara, N. Kobayashi, H. Fujimori, and Y. Muto  
*Physica B*, 148B, (1987), 239-242.
43. Anisotropic Upper Critical Magnetic Field in Single Crystal  $\text{Ba}_2\text{YCu}_3\text{O}_{7-y}$ .  
Y. Hidaka, M. Oda, M. Suzuki, A. Katsui, T. Murakami, N. Kobayashi, and Y. Muto  
*Physica B*, 148B, (1987), 329-331.
44. Superconducting Properties of the High- $T_c$  Oxide Compounds.  
N. Kobayashi, O. Nakatsu, S. Terada, T. Sasaki, M. Furuyama, K. Noto,  
M. Kikuchi, A. Tokiwa, K. Oh-ishi, Y. Syono, and Y. Muto  
*Physica B*, 148B, (1987), 469-471.
45. Superconducting and Heavy-Fermion Behavior in the  $(\text{La}_{1-x}\text{Cex})\text{Pd}_2\text{Ge}_2$  System.  
H. Iwasaki, N. Kobayashi, and Y. Muto  
*Physica B*, 148B, (1987), 64-66.

46. Thermal and X-Ray Analyses of High Temperature Superconductor  $\text{YBa}_2\text{Cu}_3\text{O}_{6.74}$ .  
M. Kikuchi, Y. Syono, A. Tokiwa, K. Oh-ishi, H. Arai, K. Hiraga, N. Kobayashi, T. Sasaoka, and Y. Muto  
Jpn. J. Appl. Phys., 26, (1987), L1066-1069.
47. Effect of Co Substitution on  $T_c$  in  $\text{YBa}_2\text{Cu}_{3-x}\text{Co}_x\text{O}_{7-y}$  ( $x=0\sim 1$ ).  
D. Shindo, K. Hiraga, M. Hirabayashi, A. Tokiwa, M. Kikuchi, Y. Syono, O. Nakatsu, N. Kobayashi, Y. Muto, and E. Aoyagi  
Jpn. J. Appl. Phys., 26, (1987), L1667-1669.
48. Upper Critical Fields on High Temperature Superconductivity in La-Sr-Cu-O System.  
N. Kobayashi, T. Sasaoka, K. Oh-ishi, T. Sasaki, M. Kikuchi, A. Endo, K. Matsuzaki, A. Inoue, K. Noto, Y. Syono, Y. Saito, T. Masumoto, and Y. Muto  
Jpn. J. Appl. Phys., 26, (1987), L358-360.
49.  $^{139}\text{La}$  Pure Quadrupole Resonance of High  $T_c$  Superconducting Materials ( $\text{La}_{1-x}\text{M}_x$ ) $_2\text{CuO}_4$  ( $\text{M}=\text{Ba}, \text{Sr}$ ).  
Y. Kitaoka, S. Hiramatsu, T. Kohara, K. Asayama, K. Oh-ishi, M. Kikuchi and N. Kobayashi  
Jpn. J. Appl. Phys., 26, (1987), L397-398.
50. Upper Critical Field of  $\text{Sr}_x\text{La}_{2-x}\text{CuO}_{4-y}$ .  
H. Ihara, M. Hirabayashi, N. Terada, K. Bushida, M. Akimoto, N. Kobayashi, N. Toyota, and Y. Muto  
Jpn. J. Appl. Phys., 26, (1987), L458-459.
51. X-Ray and Electron Microscopic Study of a High Temperature Superconductor  $\text{Y}_{0.4}\text{Ba}_{0.6}\text{CuO}_{2.22}$ .  
Y. Syono, M. Kikuchi, K. Oh-ishi, K. Hiraga, H. Arai, Y. Matsui, N. Kobayashi, T. Sasaoka, and Y. Muto  
Jpn. J. Appl. Phys., 26, (1987), L498-501.
52. Upper Critical Field of High  $T_c$  Superconductor  $\text{Y}_{0.4}\text{Ba}_{0.6}\text{CuO}_{2.22}$ .  
N. Kobayashi, T. Sasaoka, K. Oh-ishi, M. Kikuchi, M. Furuyama, T. Sasaki, K. Noto, Y. Syono, and Y. Muto  
Jpn. J. Appl. Phys., 26, (1987), L757-758.

53. High Field Properties of Superconducting  $Y_xBa_{1-x}Cu$ -Oxides.  
K. Noto, H. Morita, K. Watanabe, Y. Murakami, H. Fujimori, N. Kobayashi, and Y. Muto  
Jpn. J. Appl. Phys., 26, (1987), L802-803.
54. Upper Critical Field of High  $T_c$  Superconducting Oxides.  
N. Kobayashi, T. Sasaoka, K. Oh-ishi, T. Sasaki, M. Kikuchi, K. Noto, Y. Syono, and Y. Muto  
Jpn. J. Appl. Phys., 26- 3 , (1987), 1173-1174.
55. Critical Current Density Characteristics in Superconducting  $Y_xBa_{1-x}Cu$ -Oxides.  
K. Noto, H. Morita, K. Watanabe, Y. Murakami, Y. Obi, H. Fujimori, N. Kobayashi, and Y. Muto  
Jpn. J. Appl. Phys., 26- 3 , (1987), 1195-1196.
56. Electrical Resistance and Specific Heat of Magnetic-Field-Induced-Superconductors,  $Eu_{0.8}Sn_{0.2}Mo_6S_{7-y}Se_y$ .  
S. Kawamata, N. Kobayashi, M. Ikebe, and Y. Muto  
Jpn. J. Appl. Phys., 26- 3 , (1987), 1267-1268.
57. Specific Heat Study of Body Centered Tetragonal  $ErRh_4B_4$ .  
H. Iwasaki, M. Ikebe, N. Kobayashi, and Y. Muto  
Jpn. J. Appl. Phys., 26- 3 , (1987), 1277-1278.
58. Superconducting Properties in  $Mo_6Se_{8-x}S_x$ .  
M. Furuyama, N. Kobayashi, K. Noto, and Y. Muto  
Jpn. J. Appl. Phys., 26- 3 , (1987), 969-970.
59. Possibility of a Very High Upper Critical Field of the New High  $T_c$  Superconductor La-Ba-Cu Oxide.  
N. Kobayashi, K. Oh-ishi, T. Sasaoka, M. Kikuchi, T. Sasaki, S. Murase, K. Noto, Y. Syono, and Y. Muto  
J. Phys. Soc. Jpn., 56, (1987), 1309-1311.
60. Present Status of High  $T_c$  Oxide Superconductivity Studies at Tohoku University.  
Y. Muto, N. Kobayashi, and Y. Syono  
Novel Superconductivity, (1987), 787-799.
61. Current Carrying Properties in High  $T_c$  Y-Ba-Cu-O System.  
K. Noto, K. Watanabe, H. Morita, Y. Murakami, I. Yoshii, I. Sato, H. Sugawara, N. Kobayashi, H. Fujimori, and Y. Muto  
Novel Superconductivity, (1987), 801-805.

62. Effects of Cation Substitution on the Structural and Superconducting Properties of  $\text{YBa}_2\text{Cu}_3\text{O}_7$ .  
Y. Syono, A. Tokiwa, M. Kikuchi, K. Kusaba, R. Suzuki, T. Kajitani, D. Shindo, N. Kobayashi, O. Nakatsu, and Y. Muto  
Jpn. J. Appl. Phys., Series 1, (1988), 42-45
63. Crystal Structure and Superconductivity Controlled by Cation Substitution and Oxygen Annealing in  $\text{Y}_{1-x}\text{Ca}_x\text{Ba}_2\text{Cu}_3\text{O}_y$  and  $\text{YBa}_{2-x}\text{La}_x\text{Cu}_3\text{O}_y$ .  
A. Tokiwa, Y. Syono, M. Kikuchi, R. Suzuki, T. Kajitani, N. Kobayashi, T. Sasaki, O. Nakatsu, and, Y. Muto  
Jpn. J. Appl. Phys., 27 (6), (1988), L1009-L1012.
64. Specific Heat of  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  in Magnetic Fields up to 6T.  
T. Sasaki, N. Kobayashi, O. Nakatsu, T. Matsuhira, A. Tokiwa, M. Kikuchi, Y. Syono, and Y. Muto  
Physica C, 153-155, (1988), 1012-1013.
65. Thermal Transport and Magnetic Properties of  $\text{GdBa}_2\text{Cu}_3\text{O}_{7-y}$  Superconductor.  
K. Mori, K. Noto, M. Sasakawa, Y. Isikawa, K. Sato, N. Kobayashi, and Y. Muto  
Physica C, 153-155, (1988), 1515-1516.
66. Upper and Lower Critical Fields of  $\text{REBa}_2\text{Cu}_3\text{O}_z$  Compounds.  
N. Kobayashi, H. Iwasaki, S. Terada, K. Noto, A. Tokiwa, M. Kikuchi, Y. Syono, and Y. Muto  
Physica C, 153-155, (1988), 1525-1526.
67. Specific Heat of  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  and  $\text{BaCuO}_{2+x}$  in Magnetic Fields up to 6T.  
T. Sasaki, O. Nakatsu, N. Kobayashi, A. Tokiwa, M. Kikuchi, A. Liu, K. Hiraga, Y. Syono, and Y. Muto  
Physica C, 156, (1988), 395-404.
68. Analytical Electron Microscopic Study of High- $T_c$  Superconductor Bi-Ca-Sr-Cu-O.  
D. Shindo, K. Hiraga, M. Hirabayashi, N. Kobayashi, M. Kikuchi, K. Kusaba, Y. Syono, and Y. Muto  
Jpn. J. Appl. Phys., 27, (1988), 2048-2051.
69. Crystal Structure and Superconductivity Controlled by Cation Substitution and Oxygen Annealing in  $\text{Y}_{1-x}\text{Ca}_x\text{Ba}_2\text{Cu}_3\text{O}_7$  and  $\text{YBa}_{2-x}\text{La}_x\text{Cu}_3\text{O}_y$ .  
A. Tokiwa, Y. Syono, M. Kikuchi, R. Suzuki, T. Kajitani, N. Kobayashi, T. Sasaki, O. Nakatsu, and Y. Muto  
Jpn. J. Appl. Phys., 27, (1988), L1009-1012.

70. Synthesis and Superconductivity of a New High- $T_c$  Tl-Ba-Ca-Cu-O Phase.  
M. Kikuchi, N. Kobayashi, H. Iwasaki, D. Shindo, T. Oku, A. Tokiwa, T. Kajitani,  
K. Hiraga, Y. Syono, and Y. Muto  
Jpn. J. Appl. Phys., 27, (1988), L1050-1053.
71. Tc of c-Axis-Oriented Y-Ba-Cu-O Films Prepared by CVD.  
H. Yamane, H. Kurosawa, H. Iwasaki, H. Masumoto, T. Hirai, N. Kobayashi, and  
Y. Muto  
Jpn. J. Appl. Phys., 27, (1988), L1275-1276.
72. Crystal Structure, Oxygen Content and Superconductivity of  $M_xLa_{2-x}CuO_{4-y}$   
( $M=Ba, Sr$  and  $Ca$ ).  
K. Oh-ishi, M. Kikuchi, Y. Syono, N. Kobayashi, T. Sasaoka, T. Matsuhira,  
Y. Muto, and H. Yamauchi  
Jpn. J. Appl. Phys., 27, (1988), L1449-1452.
73. Synthesis of Long and Short Period Bi-Ca-Sr-Cu Oxides.  
T. Kajitani, M. Hirabayashi, M. Kikuchi, K. Kusaba, Y. Syono, N. Kobayashi,  
H. Iwasaki, and Y. Muto  
Jpn. J. Appl. Phys., 27, (1988), L1453-1456.
74. Formation of Bismuth Strontium Calcium Copper Oxide Superconducting Films  
by Chemical Vapor Deposition.  
H. Yamane, H. Kurosawa, T. Hirai, H. Iwasaki, N. Kobayashi, and Y. Muto  
Jpn. J. Appl. Phys., 27, (1988), L1495-1497.
75. Upper and Lower Critical Fields of High- $T_c$  Tl-Ba-Ca-Cu-O System.  
H. Iwasaki, N. Kobayashi, Y. Koike, M. Kikuchi, Y. Syono, K. Noto, and Y. Muto  
Jpn. J. Appl. Phys., 27, (1988), L1631-1633.
76. Crystal Structures of Tl-Ba-Ca-Cu-O Superconducting Phases Studied by High-  
Resolution Electron Microscopy.  
K. Hiraga, D. Shindo, M. Hirabayashi, M. Kikuchi, N. Kobayashi, and Y. Syono  
Jpn. J. Appl. Phys., 27, (1988), L1848-1851.
77. An X-Ray Diffraction and Electron Microscopic Study of a New High- $T_c$   
Superconductor Based on the Bi-Ca-Sr-Cu-O System.  
Y. Syono, K. Hiraga, N. Kobayashi, M. Kikuchi, K. Kusaba, T. Kajitani, D. Shindo,  
S. Hosoya, A. Tokiwa, S. Terada, and Y. Muto  
Jpn. J. Appl. Phys., 27, (1988), L569-572.

78. Structural Study on High-Tc Superconductor  $\text{Bi}_{2-x}(\text{Ca}, \text{Sr})_3\text{Cu}_{2+x}\text{O}_{9-y}$ .  
T. Kajitani, K. Kusaba, M. Kikuchi, N. Kobayashi, Y. Syono, T. B. Williams, and M. Hirabayashi  
Jpn. J. Appl. Phys., 27, (1988), L587-590.
79. Y-Ba-Cu-O Superconducting Films Prepared on  $\text{SrTiO}_3$  Substrates by Chemical Vapor Deposition.  
H. Ymane, H. Masumoto, T. Hirai, H. Iwasaki, K. Watanabe, N. Kobayashi, Y. Muto, and H. Kurosawa  
Appl. Phys. Lett., 53, (1988), 1548-1550.
80. Temperature Dependence of Electrical Resistivity for Y-Ba-Cu-O Films Prepared by CVD.  
H. Yamane, H. Kurosawa, T. Hirai, H. Iwasaki, N. Kobayashi, and Y. Muto  
J. Ceram. Soc. Jpn. Inter. Ed., 96, (1988), 776-777.
81. 31.1 T-Hybrid Magnet and Superconducting Materials Research at HFLSM, Tohoku University.  
K. Noto, K. Watanabe, N. Kobayashi, A. Hoshi, S. Miura, G. Kido, Y. Nakagawa, and Y. Muto  
Advances in Cryogenic Engineering: Materials., vol. 34, (1988), 925-932.
82. Synthesis of Bulk High  $T_c$  Superconductors of  $\text{TlBa}_2\text{Can}_{-1}\text{Cu}_n\text{O}_{2n+3}$  ( $n=2-5$ ).  
S. Nakajima, M. Kikuchi, Y. Syono, T. Oku, D. Shindo, K. Hiraga, N. Kobayashi, H. Iwasaki, and Y. Muto  
Physica C, 158, (1989), 471-476.
83. Preparation of the Bulk Superconductor  $\text{Tl}_2\text{Ba}_2\text{Ca}_3\text{Cu}_4\text{O}_{12}$ .  
M. Kikuchi, S. Nakajima, Y. Syono, K. Hiraga, T. Oku, D. Shindo, N. Kobayashi, H. Iwasaki, and Y. Muto  
Physica C, 158, (1989), 79-82.
84. Correlation between  $T_c$  and Hole Concentration in the Cation-Substituted  $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$  System.  
Y. Koike, Y. Iwabuchi, S. Hosoya, N. Kobayashi, and T. Fukase  
Physica C, 159, (1989), 105-110.
85. Resistive Transition in  $\text{YBa}_2\text{Cu}_3\text{O}_z$  and  $\text{Bi}_2(\text{Sr}, \text{Ca})_3\text{Cu}_2\text{O}_z$  CVD Films under High Magnetic Field.  
N. Kobayashi, H. Iwasaki, H. Kawabe, K. Watanabe, H. Yamane, H. Kurosawa, H. Masumoto, T. Hirai, and Y. Muto  
Physica C, 159, (1989), 295-300.



86. Anisotropic Superconducting Properties of High- $T_c$  Tl-Ba-Ca-Cu-O Single Crystal.  
H. Iwasaki, N. Kobayashi, M. Kikuchi, T. Kajitani, Y. Syono, Y. Muto, and S. Nakajima  
Physica C, 159, (1989), 301-305.
87. Oxygen K-Edge Fine Structure of  $TlBa_2Ca_{1-x}Y_xCu_2O_7$  Studied by Electron Energy Loss Spectroscopy.  
D. Shindo, K. Hiraga, S. Nakajima, M. Kikuchi, Y. Syono, N. Kobayashi, K. Hojou, T. Soga, S. Furuno, and H. Otsu  
Physica C, 159, (1989), 794-796.
88. Over-Doping of  $Tl_2Ba_2CuO_6$  due to Charge Transfer  $TI^{3+}$ - (Cu-O)<sup>p</sup>.  
S. Nakajima, M. Kikuchi, T. Oku, N. Kobayashi, T. Suzuki, K. Nagase, K. Hiraga, Y. Muto, and Y. Syono  
Physica C, 160, (1989), 458-460.
89. Transport Critical Current and Morphology for Y-Ba-Cu-O Films by Chemical Vapor Deposition.  
Y. Muto, K. Watanabe, N. Kobayashi, H. Kawabe, H. Yamane, H. Kurosawa, and T. Hirai  
Physica C, 162-164, (1989), 105-106.
90. Synthesis and Superconducting Properties of (Bi, Pb)-Sr-Ca-Cu-O System.  
N. Kobayashi, H. Kawabe, K. Kusaba, M. Kikuchi, Y. Syono, and Y. Muto  
Physica C, 162-164, (1989), 27-28.
91. Low-Temperature Specific Heat of Single-Crystal  $Bi_2Sr_2Ca_1Cu_2O_z$ .  
T. Sasaki, Y. Muto, T. Shishido, T. Sasaki, T. Kajitani, M. Furuyama, N. Kobayashi and T. Fukuda  
Physica C, 162-164, (1989), 504-505.
92. Electric Resistance in the Mixed State of the High  $T_c$  Oxide Films.  
N. Kobayashi, H. Kawabe, H. Iwasaki, K. Watanabe, H. Yamane, H. Kurosawa, H. Masumoto, T. Hirai, T. Matsushita, and Y. Muto  
Physica C, 162-164, (1989), 683-684.
93. High Critical-Current Density of Y-Ba-Cu-O Superconducting Films Prepared by CVD.  
H. Yamane, H. Kurosawa, T. Hirai, K. Watanabe, H. Iwasaki, N. Kobayashi, and Y. Muto  
Supercond, Sci, Technol., 2, (1989), 115-117.

94. Preparation and Chemical Composition of Superconducting Oxide  $Tl_2Ba_2Ca_{n-1}Cu_nO_{2n+4}$  with  $n=1, 2$  and  $3$ .  
M. Kikuchi, T. Kajitani, T. Suzuki, S. Nakajima, K. Hiraga, N. Kobayashi, H. Iwasaki, Y. Syono, and Y. Muto  
Jpn. J. Appl. Phys., 28, (1989), L382-385.
95. Analytical Electron Microscopy of High- $T_c$  Superconductors in the (Bi, Pb)-Ca-Sr-Cu-O System.  
D. Shindo, H. Sato, G. L. Liedl, K. Hiraga, N. Kobayashi, M. Hirabayashi, and Y. Muto  
Jpn. J. Appl. Phys., 28, (1989), L415-418.
96. Critical Current Criterion in High- $T_c$  Superconducting Films.  
K. Watanabe, N. Kobayashi, H. Yamane, H. Kurosawa, T. Hirai, H. Kawabe and Y. Muto  
Jpn. J. Appl. Phys., 28, (1989), L1417-420.
97. Preparation of Bi-Sr-Ca-Cu-O Superconducting Films by CVD.  
H. Yamane, H. Kurosawa, H. Iwasaki, T. Hirai, N. Kobayashi, and Y. Muto  
Jpn. J. Appl. Phys., 28, (1989), L827-830.
98. Electron-Phonon Interactions in the Superconducting Chevrel Phase Compounds  $Mo_6Se_8-xS_x$ .  
M. Furuyama, N. Kobayashi, and Y. Muto  
Phys. Rev. B, 40, (1989), 4344-4354.
99. Chemical State of Tl in the Superconducting  $Tl_2Ba_2Ca_2Cu_3O_{10}$  Studied by X-Ray Photoelectron Spectroscopy.  
T. Suzuki, M. Nagoshi, Y. Fukuda, Y. Shyono, M. Kikuchi, N. Kobayashi and Y. Muto  
Phys. Rev. B, 40, (1989), 5184-5186.
100. Critical Currents at 77.3 K under Magnetic Fields up to 27 T for an Y-Ba-Cu-O Film Prepared by Chemical Vapour Deposition.  
K. Watanabe, H. Yamane, H. Kurosawa, T. Hirai, N. Kobayashi, H. Iwasaki, K. Noto, and Y. Muto  
Appl. Phys. Lett., 54, (1989), 575-577.
101. Successive Magnetic Transitions and Large Reduction of Resistivity with Ferromagnetic Ordering in UPdGe.  
S. Kawamata, H. Iwasaki, N. Kobayashi, T. Mitsugashira, and Y. Muto  
J. Phys. Soc. Jpn., 58, (1989), 2654-2657.

102. Relation between Lattice Parameters and Valence State of Cu Ions of  $M_x\text{Nd}_{2-x}\text{CuO}_{4-y}$  ( $M=\text{Na}$  and  $\text{Ce}$ ) Solid Solution.  
K. Oh-ishi, M. Kikuchi, Y. Syono, N. Kobayashi, and Y. Muto  
J. Solid State Chemi., 83, (1989), 237-244.
103. Effect of Deposition Temperature on the Superconducting Properties of Y-Ba-Cu-O Films Prepared by CVD.  
H. Yamane, H. Kurosawa, T. Hirai, K. Watanabe, H. Iwasaki, N. Kobayashi, and Y. Muto  
J. Crystal Growth, 98, (1989), 860-866.
104. Structure, Composition and Superconductivity of High  $T_c$  Tl-Ba-Ca-Cu-O System.  
Y. Syono, M. Kikuchi, S. Nakajima, T. Suzuki, T. Oku, K. Hiraga, N. Kobayashi, H. Iwasaki, and Y. Muto  
Mat. Res. Soc. Symp. Proc., vol 159, (1989), 229-238.
105. Macroscopic Nature of Transport Properties in High- $T_c$  Superconductors.  
Y.Muto, N.Kobayashi and K.Watanabe  
Physica B, 164, (1990), 139-149.
106. Correlation between Magnetic Relaxation and  $J_c$  of  $\text{YBa}_2\text{Cu}_3\text{O}_7$  Films.  
N. Kobayashi, K. Miyoshi, H. Kawabe, K. Watanabe, H. Yamane, H. Kurosawa, T. Hirai and Y. Muto  
Physica B, 165&166, (1990), 1133-1134.
107. Different Origins of  $T_c$ -Suppression in  $\text{YBa}_2(\text{Cu}_{1-x}\text{M}_x)_3\text{O}_y$  ( $M=\text{Co}$  and  $\text{Zn}$ ).  
S. Terada, N. Kobayashi, H. Iwasaki, A. Tokiwa, M. Kikuchi, Y. Syono and Y. Muto  
Physica B, 165&166, (1990), 1545-1546.
108. Superconducting Properties of  $\text{Pb}_2\text{Sr}_2\text{Y}_{1-x}\text{Ca}_x\text{Cu}_3\text{O}_{8+\delta}$ .  
Y. Koike, M. Masuzawa, H. Sunagawa, T. Noji, H. Kawabe, N. Kobayashi and Y. Saito  
Physica B, 165&166, (1990), 1555-1556.
109. Thermogravimetric Studies of the Over-Doping State of  $\text{Tl}_2\text{Ba}_2\text{CuO}_{6-\delta}$  Due to Charge Transfer.  
M. Kikuchi, S. Nakajima, Y. Syono, K. Nagase, R. Suzuki, T. Kajitani, N. Kobayashi and Y. Muto  
Physica C, 166, (1990), 497-501.

110. Synthesis and Superconductivity of  $\text{PbBaSrY}_{1-x}\text{Ca}_x\text{Cu}_3\text{O}_7$ . A.Tokiwa, M. Nagoshi, T. Oku, N. Kobayashi, M. Kikuchi, K. Hiraga and Y. Syono  
Physica C, 168, (1990), 285-290.
111. Superconductivity of High- $T_c$   $\text{TiBa}_2\text{Ca}_{1-x}\text{RE}_x\text{Cu}_2\text{O}_7$  (RE=Nd, Gd or Y) System.  
S. Nakajima, M. Kikuchi, Y. Syono, N. Kobayashi and Y. Muto  
Physica C, 168, (1990), 57-62.
112. Normal and Superconducting Properties of  $\text{Pb}_2\text{Sr}_2\text{Y}_{1-x}\text{Ca}_x\text{Cu}_3\text{O}_{8+\delta}$  I: Dependence on the Ca Concentration.  
Y. Koike, M. Masuzawa, T. Noji, H. Sunagawa, H. Kawabe, N. Kobayashi and Y. Saito  
Physica C, 170, (1990), 130-138.
113. Improvement in Superconductivity of  $\text{TiBa}_2\text{CaCu}_2\text{O}_y$  System by Introduction of Oxygen Loss.  
S. Nakajima, M. Kikuchi, Y. Syono, K. Nagase, T. Oku, N. Kobayashi, D. Shindo and K. Hiraga  
Physica C, 170, (1990), 443-447.
114. Normal and Superconducting Properties of  $\text{Pb}_2\text{Sr}_2\text{Y}_{1-x}\text{Ca}_x\text{Cu}_3\text{O}_{8+\delta}$  II. Dependence on the Oxygen Concentration.  
Y. Koike, H. Sunagawa, T. Noji, M. Masuzawa, N. Kobayashi, M. Namiki, K. Hirokawa and Y. Saito  
Physica C, 171, (1990), 331-338.
115. Preparation of Y-Ba-Cu-O Superconducting Films on  $\text{SrTiO}_3$  and MgO Substrates by Chemical Vapor Deposition.  
H. Yamane, H. Kurosawa, A. Suhara, T. Hirai, K. Watanabe, H. Iwasaki, N. Kobayashi and Y. Muto  
Mol. Cryst. Liq. Cryst., 184, (1990), 343-347.
116. Angular Dependence of the Transport Critical Current Density of CVD YBaCuO Films.  
K. Watanabe, S. Awaji, N. Kobayashi, H. Yamane, T. Hirai, Y. Muto, H. Kawabe and H. Kurosawa  
AIP Conf. Proc., 219, (1990), 398-404.

117. Upper Critical Field and Critical Current Density in Ceramic Samples of  $\text{Pb}_2\text{Sr}_2\text{Y}_{0.5}\text{Ca}_{0.5}\text{Cu}_3\text{O}_{8+\delta}$ .  
Y. Koike, M. Masuzawa, H. Sunagawa, T. Noji, H. Kawabe, N. Kobayashi and Y. Saito  
Jpn. J. Appl. Phys., 29, (1990), L408-L411.
118. Upper Critical Field and Normal-State Resistivity of the High- $T_c$  Superconductors  $\text{RBa}_2\text{Cu}_3\text{O}_y$  (R=Y, Gd, Dy, Ho, Er and Yb).  
K. Ikeda, K. Katsumata and N. Kobayashi  
Mater. Trans. JIM, 31, (1990), 184-189.
119. Strong Flux Pinning Centers in Y-Ba-Cu-O Films Prepared by Chemical Vapor Deposition.  
K. Watanabe, T. Matsushita, N. Kobayashi, H. Kawabe, E. Aoyagi, K. Hiraga, H. Yamane, H. Kurosawa, T. Hirai and Y. Muto  
Appl. Phys. Lett., 56, (1990), 1490-1492.
120. Shock-Induced Superconductivity of  $\text{Tl}_2\text{Ba}_2\text{CuO}_6$ .  
M. Kikuchi, Y. Syono, N. Kobayashi, T. Oku, E. Aoyagi, K. Hiraga, K. Kusaba, T. Atou, A. Tokiwa, K. Fukuoka and S. Nakajima  
Appl. Phys. Lett., 57, (1990), 813-815.
121. Relation between  $T_c$  and Cu-O Bond Length within the Basal Plane of  $\text{Ce}_{0.15}\text{Nd}_{1.85-x}\text{M}_x\text{CuO}_{4-y}$  (M=La and Sm) and  $\text{Ce}_{0.15}\text{Pr}_{1.85}\text{CuO}_{4-y}$ .  
K. Oh-ishi, Y. Syono, M. Kikuchi, N. Kobayashi and Y. Muto  
Solid State Commun., 73, (1990), 341-343.
122. Magnetic and Transport Properties of  $\text{UTGe}$  (T: Ni, Pd and Pt).  
S. Kawamata, K. Ishimoto, H. Iwasaki, N. Kobayashi, Y. Yamaguchi, T. Komatsubara, G. Kido, T. Mitsugashira and Y. Muto  
J. Magn. Magn. Mater., 90&91, (1990), 513-514.
123. Superconductivity of High  $T_c$   $\text{TlBa}_2\text{Ca}_{1-x}\text{Y}_x\text{Cu}_2\text{O}_7$  ( $0 \leq x \leq 1.0$ ) System.  
S. Nakajima, M. Kikuchi, N. Kobayashi, H. Iwasaki, D. Shindo, Y. Syono and Y. Muto  
Proc. 2nd Int. Symp. Superconductivity, (1990), 219-222.
124. Valence State of  $\text{Ba}_{1-x}\text{K}_x\text{BiO}_{3-\delta}$  Superconductor Controlled by the Oxygen Content.  
K. Ueki, A. Tokiwa, M. Kikuchi, T. Suzuki, M. Nagoshi, R. Suzuki, N. Kobayashi and Y. Syono  
Proc. 2nd Int. Symp. Superconductivity, (1990), 489-492.

125. High- $T_c$  Superconducting Oxide Films Prepared by CVD.  
H. Yamane, T. Hirai, H. Kurosawa, A. Suhara, K. Watanabe, N. Kobayashi,  
H. Iwasaki, E. Aoyagi, K. Hiraga and Y. Muto  
Proc. 2nd Int. Symp. Superconductivity, (1990), 767-772.
126. Angular Dependence of the Upper Critical Field and the Critical Current Density  
for  $Y_1Ba_2Cu_3O_{7-\delta}$  Films.  
K. Watanabe, S. Awaji, N. Kobayashi, H. Yamane, T. Hirai and Y. Muto  
J. Appl. Phys., 69, (1991), 1543-1546.
127. Iodometric Determination of Oxygen Contents of the Tl Single Layer System and  
Their Relevance to Superconductivity.  
S. Nakajima, M. Kikuchi, Y. Syono, T. Oku, K. Nagase, N. Kobayashi, D. Shindo  
and K. Hiraga  
Physica C, 182, (1991), 89-94.
128. Thermal Conductivity of Single Crystal  $La_{1.85}Sr_{0.15}CuO_{4-y}$ .  
K. Mori, Y. Ogiso, Y. Ishikawa, K. Sato, M. Matsukawa, K. Noto, T. Sasaki and  
N. Kobayashi  
Physica C, 185-189, (1991), 1411-1412.
129. Angular Dependence of  $J_c$  and  $B_{c2}$  in the CVD- $YBa_2Cu_3O_{7-\delta}$  Films.  
S. Awaji, K. Watanabe, N. Kobayashi, H. Yamane, T. Hirai and Y. Muto  
Physica C, 185-189, (1991), 2199-2200.
130. On the Difference of Pinning Potentials for Thermally Activated Flux Creep  
Estimated by Resistive and Magnetization Measurements in High  $T_c$   
Superconducting Films.  
K. Yamafuji, Y. Mawatari, T. Fujiyoshi, K. Miyahara, K. Watanabe, S. Awaji and  
N. Kobayashi  
Physica C, 185-189, (1991), 2285-2286.
131. Flux Creep in  $YBa_2Cu_3O_7$  Films.  
N. Kobayashi, Y. Minagawa, K. Watanabe, S. Awaji, H. Yamane, H. Kurosawa and  
T. Hirai  
Physica C, 185-189, (1991), 2353-2354.
132. Flux Creep Measurements in Shocked  $YBa_2Cu_3O_7$  and  $La_{1.85}Sr_{0.15}CuO_4$ .  
Y. Sakaguchi, M. Kikuchi, N. Kobayashi, K. Kusaba, K. Fukuoka, Y. Minagawa and  
Y. Syono  
Physica C, 185-189, (1991), 2517-2518.

133. Chemical Characterization and Superconductivity of  $\text{TiBa}_2\text{Ca}_{n-1}\text{Cu}_n\text{O}_{y-v}$  System.  
S. Nakajima, M. Kikuchi, Y. Syono and N. Kobayashi  
*Physica C*, 185-189, (1991), 673-674.
134. Superconductivity of  $\text{Bi}_{2-z}\text{Pb}_z\text{Sr}_{2-x}\text{Ln}_x\text{CuO}_y$  ( $\text{Ln}=\text{La}, \text{Nd}$ ) and Valence Analysis of Bi and Cu.  
M. Kikuchi, H. Nameki, Y. Syono, R. Suzuki, M. Nagoshi, S. Awaji and N. Kobayashi  
*Physica C*, 185-189, (1991), 683-684.
135. Substitution Effect in  $\text{Ln}_{1.85}\text{Ce}_{0.15}\text{CuO}_4$  ( $\text{Ln}=\text{Pr}$  and  $\text{Sm}$ ).  
N. Kobayashi, A. Ito, M. Hiroi and H. Iwasaki  
*Physica C*, 185-189, (1991), 741-742.
136. Low-Temperature Formation of Y-Ba-Cu-O Superconducting Films by Thermal CVD and Their  $J_c$  in High Magnetic Fields.  
H. Yamane, M. Hasei, H. Kurosawa, K. Watanabe, S. Awaji, N. Kobayashi, T. Hirai and Y. Muto  
*Physica C*, 190, (1991), 79-80.
137. Critical Current Properties under High Magnetic Fields up to 30 T for Y-Ba-Cu-O Films by MOCVD.  
S. Matsuno, F. Uchikawa, K. Yoshizaki, N. Kobayashi, K. Watanabe, Y. Muto and M. Tanaka  
*IEEE Trans. Magn.*, 27, (1991), 1398-1401.
138. Magnetic Instability in High- $J_c$   $\text{Y}_1\text{Ba}_2\text{Cu}_3\text{O}_7$  Prepared by Quench-Melt-Growth Process.  
K. Watanabe, N. Kobayashi, S. Awaji, G. Kido, S. Nimori, K. Kimura, K. Sawano and Y. Muto  
*Jpn. J. Appl. Phys.*, 30, (1991), L1638-L1640.
139. Preparation and Superconducting Properties of Y-Ba-Cu-O Films on Oxide Polycrystalline Substrates by Chemical Vapor Deposition.  
H. Kurosawa, H. Yamane, T. Hirai, K. Watanabe, S. Awaji, N. Kobayashi and Y. Muto  
*Supercond. Sci. Technol.*, 4, (1991), 192-198.

140. Angular Dependence of Critical Current Density of  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  Films in Magnetic Fields.  
N. Kobayashi, H. Kawabe, K. Watanabe, S. Awaji, H. Yamane, H. Kurosawa, T. Hirai and Y. Muto  
Supercond. Sci. Technol., 4, (1991), S328-S330.
141. Preparation of a High- $J_c$  Y-Ba-Cu-O Film at 700 °C by Thermal Chemical Vapor Deposition.  
H. Yamane, T. Hirai, K. Watanabe, N. Kobayashi, Y. Muto, M. Hasei and H. Kurosawa  
J. Appl. Phys., 69, (1991), 7948-7950.
142. Transport Properties of  $\text{R}_{1-x}\text{Pr}_x\text{Ba}_2\text{Cu}_3\text{O}_y$  Systems.  
H. Iwasaki, J. Sugawara and N. Kobayashi  
Physica C, (1991), 1249-1250.
143. Superconductivity of  $\text{Ln}_{1.85-x}\text{La}_x\text{Ce}_{0.15}\text{CuO}_4$  (Ln=Pr, Sm).  
A. Ito, H. Iwasaki and N. Kobayashi  
Advances in Superconductivity III , (1991), 267-270.
144. Crystal Structure and Superconductivity of New Pb Families with (Pb, Cu) Double Layer - $\text{Pb}(\text{Ba}, \text{Sr})_2(\text{Y}, \text{Ca})\text{Cu}_3\text{O}_y$  and  $\text{Pb}(\text{Ba}, \text{Sr})_2(\text{Eu}, \text{Ce})_2\text{Cu}_3\text{O}_y$ .  
A. Tokiwa, Y. Syono, T. Oku, M. Nagoshi, N. Kobayashi, M. Kikuchi and K. Hiraga  
Advances in Superconductivity III , (1991), 307-310.
145. Comparative Study of the Superconductivity of  $\text{Tl}_2\text{Ba}_2\text{CuO}_w$  and  $\text{Bi}_2\text{Sr}_2\text{CuO}_y$ .  
M. Kikuchi, H. Nameki, S. Nakajima, A. Tokiwa, Y. Syono, and N. Kobayashi  
Advances in Superconductivity III , (1991), 419-422.
146. Superconductivity of  $\text{TlBa}_2\text{Ca}_{n-1}\text{Cu}_n\text{O}_y$  System in Over-Doping State.  
S. Nakajima, M. Kikuchi, Y. Syono, K. Nagase and N. Kobayashi  
Advances in Superconductivity III , (1991), 423-426.
147. Flux Pinning in CVD Processed YBaCuO Film.  
K. Watanabe, S. Awaji, N. Kobayashi, H. Yamane, T. Hirai, Y. Muto and T. Yamashita  
Advances in Superconductivity III , (1991), 473-478.



148. Preparation of a-Axis and c-Axis Oriented Y-Ba-Cu-O Superconducting Oxide Films by CVD.  
H. Yamane, M. Hasei, T. Hirai, K. Watanabe, N. Kobayashi, H. Kurosawa and Y. Muto  
Advances in Superconductivity III , (1991), 973-976.
149. Electrical Resistivity of UTGe(T: Ni, Pd, Pt) Single Crystals.  
S. Kawamata, H. Iwasaki, N. Kobayashi, K. Ishimoto, Y. Yamaguchi and T. Komatsubara  
J. Mag. Mag. Mat., 104-107, (1992), 53-54.
150. Specific Heat of UTGe and ThTGe (T: Ni, Pd, Pt).  
S. Kawamata, H. Iwasaki and N. Kobayashi  
J. Mag. Mag. Mat., 104-107, (1992), 55-56.
151. Magnetization of UTGe(T:Ni, Pd, Pt) Single Crystals in High Magnetic Fields.  
S. Kawamata, G. Kido, K. Ishimoto, Y. Yamaguchi, H. Iwasaki, N. Kobayashi and T. Komatsubara  
Physica B, 177, (1992), 169-172.
152. Carrier Doping and Resistive and Magnetic Anomalies in Partially Substituted  $\text{Ca}_{1-x}\text{Sr}_x\text{CuO}_2$ .  
H. Matsuo, Y. Koike, T. Noji, N. Kobayashi and Y. Saito  
Physica C, 196, (1992), 276-284.
153. Shock-Loading Effects on Flux Pinning of the High- $T_c$  Superconductor  $\text{La}_{1.85}\text{Sr}_{0.15}\text{CuO}_4$ .  
Y. Sakaguchi, M. Kikuchi, N. Kobayashi, K. Fukuoka and Y. Syono  
Physica C, 201, (1992), 183-188.
154. Structural and Superconducting Properties of Iodine-Intercalated  $\text{Bi}_2\text{Sr}_2\text{Ca}_{1-x}\text{Y}_x\text{Cu}_2\text{O}_z$ .  
Y. Muraoka, M. Kikuchi, N. Onishi, K. Hiraga, R. Suzuki, N. Kobayashi and Y. Syono  
Physica C, 204, (1992), 65-70.
155. Fluctuation Conductivity of a c-Axis-Oriented  $\text{YBa}_2\text{Cu}_3\text{O}_y$  Film Prepared by Chemical Vapor Deposition.  
J. Sugawara, H. Iwasaki, N. Kobayashi, H. Yamane and T. Hirai  
Phys. Rev. B, 26, (1992), 14818-14822.

156. Morphology of High- $J_c$  CVD-Film and Crystal Structures of Simple Superconductors.  
T. Kajitani, T. Oku, K. Hiraga, H. Yamane, T. Hirai, S. Hosoya, T. Fukuda, K. Oh-ishi, S. Nakajima, M. Kikuchi, Y. Syono N. Kobayashi and Y. Muto  
Prog. High Temp. Supercond., 28, (1992), 131-159.
157. Dimensional Crossover Effect in  $J_c$  Characteristics of Chemical Vapor Deposition Processed  $YBa_2Cu_3O_{7-\delta}$  Films.  
S. Awaji, K. Watanabe, N. Kobayashi, H. Yamane and T. Hirai  
Jpn. J. Appl. Phys., 31(11A), (1992), L1532-L1535.
158. Flux Jumps in the Magnetization of QMG Processed  $Y_1Ba_2Cu_3O_7$ .  
K. Watanabe, S. Awaji, N. Kobayashi, S. Nimori, G. Kido, K. Kimura and M. Hashimoto  
Cryogenics, 32(11), (1992), 959-963.
159. Polycrystalline  $Y_1Ba_2Cu_3O_{7-\delta}$  Films Prepared by CVD Method.  
K. Watanabe, S. Awaji, H. Yamane, H. Kurosawa, T. Hirai, N. Kobayashi and Y. Muto  
Advances in Cryogenic Engineering, 38, (1992), 991-996.
160. Critical Current Density and Its Related Problems in CVD- $Y_1Ba_2Cu_3O_7$ .  
K. Watanabe, N. Kobayashi, S. Awaji, Y. Muto, H. Yamane and T. Hirai  
J.Adv. Sci., 4, (1992), 104-109.
161. Magnetization Hysteresis in High Fields for Quench-Melt-Growth Processed  $Y_1Ba_2Cu_3O_7$ .  
K. Watanabe, S. Awaji, G. Kido, N. Kobayashi, Y. Muto, K. Kimura and K. Sawano  
Supercond. Sci. Technol., 5, (1992), S288-291.
162. CVD Route for High  $J_c$  Superconductors.  
K. Watanabe, H. Yamane, N. Kobayashi, T. Hirai and Y. Muto  
Studies of High Temp. Supercond., 8, (1992), 107-144.
163. The Absence of Superconductivity in  $PrBa_2Cu_3O_y$ .  
H. Iwasaki, J. Sugawara, O. Taniguchi and N. Kobayashi  
Mechanisms of Superconductivity (JJAP Series 7), (1992), 112-115.
164. High-Field Properties of  $(Nb,Ti)_3Sn$  Wire Fabricated by the Tube Process.  
S. Murase, S. Nakayama, N. Aoki and N. Kobayashi  
Sci. Rep. RITU, A37(1), (1992), 125-134.

165. Critical Current Properties and Microstructures in CVD- $\text{Y}_1\text{Ba}_2\text{Cu}_3\text{O}_{7-\delta}$  Films.  
K. Watanabe, N. Kobayashi, S. Awaji, H. Kawabe, Y. Muto, H. Yamane,  
H. Kurosawa and T. Hirai  
Sci. Rep. RITU, A37(1), (1992), 135-142.
166. Study of Resistive Superconducting Transition in  $\text{YBa}_2\text{Cu}_3\text{O}_7$  Films.  
N. Kobayashi, H. Kawabe, K. Watanabe, S. Awaji, H. Iwasaki, H. Yamane,  
H. Kurosawa, T. Hirai and Y. Muto  
Sci. Rep. RITU, A37(1), (1992), 143-150.
167. Upper Critical Field and Resistive Tail in High- $T_c$  Cuprates.  
Y. Koike, T. Noji, Y. Saito, N. Kobayashi, T. Nakanomyo, T. Goto and T. Fukase  
Sci. Rep. RITU, A37(1), (1992), 151-160.
168. Superconducting Properties of  $\text{Y}_1\text{Ba}_2\text{Cu}_3\text{O}_{7-x}$  MOCVD Films under High  
Magnetic Fields.  
S. Matsuno, F. Uchikawa, K. Yoshizaki, N. Kobayashi, K. Watanabe, Y. Muto and  
Y. Nakabayashi  
Sci. Rep. RITU, A37(1), (1992), 183-189.
169. Critical Current Density of Melt(QMG)-Processed  $\text{YBa}_2\text{Cu}_3\text{O}_x$  Bulk  
Superconductors.  
K. Kimura, K. Miyamoto, M. Hashimoto, K. Watanabe, S. Awaji and N. Kobayashi  
Sci. Rep. RITU, A37(1), (1992), 190-197.
170. Transport and Magnetic Properties of  $\text{Pb}_2\text{Sr}_2\text{Y}_{1-x}\text{Ca}_x\text{Cu}_3\text{O}_{8+\delta}$ .  
Y. Koike, H. Sunagawa, M. Kaiwa, N. Masuzawa, T. Noji, H. Kawabe,  
N. Kobayashi, M. Namiki, K. Hirokawa and Y. Saito  
Mechanisms of Superconductivity(JJAP Series 7), (1992), 225-230.
171. Superconductivity of the  $\text{Nd}_{1+x}\text{Ba}_{2-x}\text{Cu}_3\text{O}_{7-\delta}$  and  $\text{Nd}_{1-x}\text{Pr}_x\text{Ba}_2\text{Cu}_3\text{O}_{7-\delta}$  Systems.  
H. Iwasaki, J. Sugawara and N. Kobayashi  
The Physics and Chemistry of Oxide Superconductors, (1992), 271-274.
172. Transport and Magnetic Properties of  $\text{Pb}_2\text{Sr}_2\text{Y}_{1-x}\text{Ca}_x\text{Cu}_3\text{O}_{8+\delta}$ .  
Y. Koike, H. Sunagawa, T. Noji, M. Masuzawa, N. Kobayashi and Y. Saito  
The Physics and Chemistry of Oxide Superconductors, (1992), 275-278.

173. Anisotropic Behavior of Critical Current Density and Magnetic Relaxation in High- $J_c$   $YBa_2Cu_3O_7$  Films.  
N. Kobayashi, K. Watanabe, S. Awaji, Y. Minagawa, H. Yamane, T. Hirai and Y. Muto  
Mechanisms of Superconductivity(JJAP Series 7), (1992), 293-297.
174. Evaluation of  $PbMo_6S_8$  Coils.  
Y. Kubo, T. Nagai, F. Uchikawa, S. Utsunomiya, N. Kobayashi, K. Noto and K. Katagiri  
Sci. Rep. RITU, A37(1), (1992), 67-74.
175. Crystallographic Relationship between  $Y_2Cu_2O_5$  and 123-Phase in Chemical Vapour Deposited Y-Ba-Cu-O Superconducting Films.  
H. Yamane, S. Takagi, T. Oku, N. Ohnishi, K. Hiraga, S. Awaji, K. Watanabe, N. Kobayashi and T. Hirai  
J. Mater. Sci. Lett., 12, (1993), 1430-1433.
176. Anisotropy and Dimensional Characteristics in CVD Route  $Y_1Ba_2Cu_3O_{7-\delta}$ .  
K. Watanabe, N. Kobayashi, S. Awaji, H. Yamane, T. Hirai and Y. Muto  
Materials Science Forum, 137(139), (1993), 277-288.
177. Magnetic Phase Transitions in  $UNi_{1-x}PdxGe$  and  $UPd_{1-y}PtyGe$ .  
S. Kawamata, K. Ishimoto, Y. Yamaguchi, H. Iwasaki and N. Kobayashi  
Physica B, 186 (188), (1993), 741-743.
178. Anomalous Magnetoresistance in the Normal State of  $Y_{1-x}Pr_xBa_2Cu_3O_y$  ( $x \geq 0.6$ ) Films.  
H. Iwasaki, S. Kenmochi, O. Taniguchi and N. Kobayashi  
Physica C, 204, (1993), 406-412.
179. Correlation between Site Preference, Superconductivity and Magnetism in  $Pb_2Sr_2Y_{1-x}Ca_x(Cu_{1-y}M_y)_3O_8$  ( $M=Fe, Co, Ni, Zn, Ga$ ).  
Y. Koike, M. Kaiwa, T. Kajitani, M. Kato, H. Sunagawa, T. Noji, N. Kobayashi, Y. Morii, S. Funahashi and Y. Saito  
Physica C, 211, (1993), 409-420.
180. Effects of Iodine Intercalation on the Superconducting Properties of the  $Bi_2Sr_{2-x}La_xCuO_z$  Compound.  
Y. Muraoka, M. Kikuchi, H. Nameki, S. Awaji, R. Suzuki, N. Kobayashi and Y. Syono  
Physica C, 215, (1993), 402-406.

181. Dimensional Crossover Effect of Pinning in  $\text{YBa}_2\text{Cu}_3\text{O}_7$  Films.  
S. Awaji, K. Watanabe, N. Kobayashi, H. Yamane and T. Hirai  
*Jpn. J. Appl. Phys*, 32, (1993), L1795-L1797.
182. Fabrication and Evaluation of Small Coils Using  $\text{PbMo}_6\text{S}_8$  Wires.  
Y. Kubo, F. Uchikawa, S. Utsunomiya, K. Noto, K. Katagiri and N. Kobayashi  
*Cryogenics*, 33 (9), (1993), 883-888.
183. Effective Pinning Centers in CVD- $\text{Y}_1\text{Ba}_2\text{Cu}_3\text{O}_{7-\delta}$  Films.  
K. Watanabe, S. Awaji, N. Kobayashi, H. Yamane and T. Hirai  
*High Temperature Superconducting Electronics*, (1993), 169-181.
184. Doping Effect in the n-Type Superconductor  $\text{Ln}_{1.85}\text{Ce}_{0.15}\text{CuO}_4$ .  
M. Hiroi, H. Iwasaki and N. Kobayashi  
*Advances in Superconductivity V*, (1993), 327-330.
185. Irreversibility Line and Flux Pinning in High-Tc  $\text{Y}_1\text{Ba}_2\text{Cu}_3\text{O}_7$  Superconductors.  
K. Watanabe, S. Awaji, N. Kobayashi, G. Kido, K. Kimura and M. Hashimoto  
*Advances in Superconductivity V*, (1993), 459-462.
186. Preparation and Superconductivity of Strontium Calcium Rare-Earth Copper Oxycarbonates.  
Y. Amamoto, H. Yamane, N. Kobayashi and T. Hirai  
*IUMRS Meeting.*, (1993).
187. Magnetic-Field-Induced Superconductivity in  $\text{Eu}_{0.8}\text{Sn}_{0.2}\text{Mo}_6\text{S}_{7-y}\text{Se}_y$ .  
S. Kawamata, N. Kobayashi, M. Ikebe, and Y. Muto  
*Sci. Rep. RITU*, A38 (2), (1993), 346-352.
188. Resistive Superconducting Transition of  $\text{Y}_{1-x}\text{Pr}_x\text{Ba}_2\text{Cu}_3\text{O}_y$  Films in Magnetic Field.  
H. Iwasaki, O. Taniguchi, S. Kenmochi and N. Kobayashi  
*Physica B*, 194-196, (1994), 2117-2118.
189. Thermomagnetic Effect of QMG- $\text{YBa}_2\text{Cu}_3\text{O}_x$  in Magnetic Fields Up to 14T.  
M. Sawamura, T. Sasaki, S. Awaji, K. Watanabe, N. Kobayashi, K. Kimura, K. Miyamoto and M. Hashimoto  
*Physica B*, 194-196, (1994), 1853-1854.
190. On Suppression of Superconductivity in the  $\text{Y}_{1-x}\text{Pr}_x\text{Ba}_2\text{Cu}_3\text{O}_y$  System.  
S. Kenmochi, H. Iwasaki, and N. Kobayashi  
*Physica B*, 194-196, (1994), 2115-2116.

191. Thermal Conductivity of QMG-YBa<sub>2</sub>Cu<sub>3</sub>O<sub>x</sub> in Magnetic Fields Up to 14T.  
T. Sasaki, M. Sawamura, S. Awaji, K. Watanabe, N. Kobayashi, M. Matsukawa,  
K. Chiba, K. Noto, K. Kimura, K. Miyamoto and M. Hashimoto  
Physica B, 194-196, (1994), 2135-2136.
192. Scaling Behavior of Specific Heat and Magnetization of (Bi, Pb)<sub>2</sub>Sr<sub>2</sub>Ca<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub>  
Near T<sub>c</sub>.  
K. Egawa, N. Kobayashi, H. Iwasaki, H. Ikeda and R. Yoshizaki  
Physica B, 194-196, (1994), 2209-2210.
193. Fluctuation Effects in Specific Heat and Magnetization of c-Axis Aligned (Bi,  
Pb)<sub>2</sub>Sr<sub>2</sub>Ca<sub>2</sub>Cu<sub>3</sub>O<sub>x</sub>.  
N. Kobayashi, K. Egawa, K. Miyoshi, H. Iwasaki, H. Ikeda and R. Yoshizaki  
Physica C, 219, (1994), 265-272.
194. Preparation, Crystal Structure and Superconductivity of (C, Cu)(Sr, Ca)<sub>2</sub>(Y, Ca,  
Sr)Cu<sub>2</sub>O<sub>7</sub>.  
Y. Miyazaki, H. Yamane, T. Kajitani, N. Kobayashi, K. Hiraga, Y. Morii,  
S. Funahashi and T. Hirai  
Physica C, 230, (1994), 89-96.
195. Structure and Superconductivity of Iodine-Intercalated Bi<sub>2</sub>Sr<sub>2</sub>Cu<sub>2</sub>CO<sub>3</sub>O<sub>z</sub>.  
Y. Muraoka, H. Nameki, M. Kikuchi, S. Awaji, N. Kobayashi and Y. Syono  
Physica C, 233, (1994), 209-213.
196. Synthesis and Superconductivity of 'Hg<sub>2</sub>Cl<sub>2</sub>'-Intercalated Bi<sub>2</sub>Sr<sub>2</sub>  
Ca<sub>n-1</sub>Cu<sub>n</sub>O<sub>z</sub>(n=1-3) Compounds.  
Y. Muraoka, M. Kikuchi, N. Onishi, N. Kobayashi, K. Hiraga and Y. Syono  
Physica C, 233, (1994), 247-252.
197. Investigation on the Change of the Electrical Resistivity Around 600K in  
La<sub>2-x</sub>Sr<sub>x</sub>CuO<sub>4</sub> by the Cu Site Substitution.  
H. Sato, M. Hiroi, M. Sera and N. Kobayashi  
Physica C, 235-240, (1994), 1351-1352.
198. Anisotropy in the Electronic Resistivity and Upper Critical Magnetic Field of  
Single-Crystal Pb<sub>2</sub>Sr<sub>2</sub>Ho<sub>0.5</sub>Cu<sub>3</sub>O<sub>8</sub>.  
T. Noji, Y. Koike, H. Iwasaki, M. Kato, N. Kobayashi and Y. Saito  
Physica C, 235-240, (1994), 1421-1422.

199. Thermal Transport and Scattering Mechanism in BPSCCO High- $T_c$  Superconductors in the Vortex State.  
M. Matsukawa, K. Noto, T. Todate, T. Sasaki, J. Ikeda, N. Kobayashi, Y. Yamada and M. Ishihara  
Physica C, 235-240, (1994), 1507-1508.
  
200. Thermal Conductivity and Electrical Resistivity of c-Axis Oriented Polycrystalline  $(\text{Bi, Pb})_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_x$  in a Magnetic Field.  
K. Mori, A. Tanaka, K. Nishimura, J. Sakurai, T. Sasaki, N. Kobayashi, Y. Tanaka and M. Mimura  
Physica C, 235-240, (1994), 1509-1510.
  
201. Cu Site Substitution Effect on the Low Temperature Specific Heat in  $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ .  
M. Hiroi, H. Sato, M. Sera and N. Kobayashi  
Physica C, 235-240, (1994), 1779-1780.
  
202. Influence of the Flux Creep on the Irreversibility Line of  $\text{YBa}_2\text{Cu}_3\text{O}_y$  ( $6.6 \leq y \leq 6.9$ ) Single Crystals.  
N. Kobayashi, K. Hirano, Y. Minagawa, T. Sasaki, K. Watanabe, S. Awaji, H. Asaoka and H. Takei  
Physica C, 235-240, (1994), 2785-2786.
  
203. Morphology and Relevant  $J_c$  Properties of CVD- $\text{YBa}_2\text{Cu}_3\text{O}_7$  Films.  
S. Awaji, K. Watanabe, H. Yamane, N. Kobayashi and T. Hirai  
Physica C, 235-240, (1994), 3003-3004.
  
204. Anisotropy of Thermomagnetic Effect in  $\text{YBa}_2\text{Cu}_3\text{O}_x$ .  
T. Sasaki, J. Ikeda, N. Kobayashi, K. Watanabe, M. Sawamura, K. Kimura, K. Miyamaoto and M. Hashimoto  
Physica C, 235-240, (1994), 3175-3176.
  
205. Oriented Bulk Consolidation of Bi-Sr-Ca-Cu-O by Shock-Loading Method.  
M. Kikuchi, T. Atou, H. Hikosaka, K. Fukuoka, Y. Syono, N. Kobayashi, S. Kawamata and K. Okuda  
Jpn. J. Appl. Phys., 33, (1994), 6525-6529.
  
206. Two Dimensional Behavior of Critical Current Density in CVD- $\text{YBa}_2\text{Cu}_3\text{O}_7$  Films.  
S. Awaji, K. Watanabe, N. Kobayashi, H. Yamane and T. Hirai  
Bulletin of the Electrotechnical Laboratory, 58, (1994), 550-554.

207. Cu Site Substitution Effect on the Hall Coefficient of  $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ .  
M. Sera, H. Sato, M. Hiroi and N. Kobayashi  
Solid State Commun, 90, (1994), 803-806.
  
208. Anomalies of the Electrical Resistivity and the Thermoelectric Power around 600K in a Small x Region of  $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ .  
M. Sera, H. Sato, M. Maki, M. Hiroi and N. Kobayashi  
Solid State Communication, 92, (1994), 289-293.
  
209. Studies of the Low Temperature Electronic State in  $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$  by means of the Cu Site Substitution Effects on the Specific Heat.  
M. Hiroi, H. Sato, M. Sera and N. Kobayashi  
Solid State Communication, 92, (1994), 579-582.
  
210. Sample Dependence of Dimensional Crossover Point of Pinning in CVD- $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  Films.  
S. Awaji, K. Watanabe, N. Kobayashi, H. Yamane and T. Hirai  
Advances in Superconductivity VI, (1994), 515-518.
  
211. Anisotropic Behavior of Superconductivity in  $\text{Y}_{1-x}\text{Pr}_x\text{Ba}_2\text{Cu}_3\text{O}_y$  Films.  
H. Iwasaki, O. Taniguchi, S. Kenmochi and N. Kobayashi  
Physica C, 244, (1995), 71-77.
  
212. Anisotropic Properties of the Anomalous Second Peak in the Magnetization Curves and Irreversibility Field of  $\text{YBa}_2\text{Cu}_3\text{O}_y$  ( $6.6 \leq y \leq 6.9$ ) Single Crystals.  
N. Kobayashi, K. Hirano, T. Nishizaki, H. Iwasaki, T. Sasaki, S. Awaji, K. Watanabe, H. Asaoka and H. Takei  
Physica C, 251, (1995), 255-262.
  
213. Carrier Dependences of Anisotropy and Irreversibility Field in  $\text{Pb}_2\text{Sr}_2\text{Y}_{1-x}\text{Ca}_x\text{Cu}_3\text{O}_8$  Single Crystals.  
T. Noji, T. Takabayashi, M. Kato, T. Nishizaki, N. Kobayashi and Y. Koike  
Physica C, 255, (1995), 10-18.
  
214. Compositions at  $\text{Nb}_3\text{Al}$  Phase Boundaries at 1873K in the Nb-Al Binary Phase Diagram.  
Y. Abe, S. Hanada, S. Saito, K. Hirano and N. Kobayashi  
Scr. Metall. Mater., 32, (1995), 27-30.



215. Changes of the Dimensionality and  $T_c$  through the Iodine Intercalation and Oxidation in  $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$  Single Crystals.  
A. Fujiwara, Y. Koike, T. Noji, Y. Saito, T. Nishizaki, N. Kobayashi, A. Yamanaka, S. Takekawa, and F. Minami  
Phys. Rev. B, 52, (1995), 15598-15606.
216. Thermal Conductivity and Structural Instability in La- and Cu-Site-Substituted  $\text{La}_2\text{CuO}_4$ .  
M. Sera, M. Maki, M. Hiroi, N. Kobayashi, T. Suzuki and T. Fukase  
Phys. Rev. B, 52, (1995), R735-R738.
217. Hall Anomaly in the Vortex State of  $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ .  
Y. Matsuda, T. Nagaoka, G. Suzuki, K. Kumagai, M. Suzuki, M. Machida, M. Sera, M. Hiroi, and N. Kobayashi  
Phys. Rev. B, 52, (1995), R15749-R15752
218. Critical Current Densities along the c-Axis of Single Crystalline  $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$ .  
K. Kadowaki, T. Mochiku, H. Takeya, K. Hirata, T. Nishizaki and N. Kobayashi  
Critical State in Superconductors, (1995), 24-31
219. Current Leads Consisting of QMG- $\text{YBa}_2\text{Cu}_3\text{O}_x$ .  
K. Kimura, M. Sawamura, K. Miyamoto, M. Hashimoto K. Watanabe, S. Awaji and N. Kobayashi  
Advances in Superconductivity VII, (1995), 851-854.
220. Design and Characterization of a New Oxide Superconductor Based on the Concept of "Inter-layer Epitaxy".  
S. Kambe, C. Yoshida, S. Ohshima, K. Okuyama, S. Kikkawa and N. Kobayashi  
Bull. Yamagata Univ. (Eng.), 24, (1996), 43-52.
221. Ultrasonic Investigations on Some Highly Correlated Electron Systems in the Magnetic Field.  
M. Yoshizawa, N. Yoshimoto, D. H. Yoon, T. Sasaki, N. Toyota, H. Iwasaki, N. Kobayashi, and T. Fukase  
Sci. Rep. RITU, A42, (1996), 321-326.
222. Dimensionality and Irreversibility Field in  $\text{YBa}_2\text{Cu}_3\text{O}_7$  Films.  
S. Awaji, K. Watanabe, N. Kobayashi, H. Yamane and T. Hirai  
Sci. Rep. RITU, A42, (1996), 333-337.

223. Thermal Conductivity and Scattering Mechanisms in High- $T_c$  Oxide Superconductors.  
K. Noto, M. Matsukawa, K. Iwasaki, K. Watanabe T. Sasaki and N. Kobayashi  
Sci. Rep. RITU, A42, (1996), 359-364.
224. Study of Transport Properties in High Magnetic Fields on the  $Y_{1-x}Pr_xBa_2Cu_3O_y$  Films.  
H. Iwasaki and N. Kobayashi  
Sci. Rep. RITU, A42, (1996), 365-370.
225. Highly Strengthened Superconducting Magnet for a 40 T Compact Hybrid Magnet.  
K. Watanabe, S. Awaji, N. Kobayashi, T. Fukase, M. Motokawa, K. Koyanagi, Y. Sumiyoshi, M. Urata, M. Tezuka, S. Nakayama and S. Murase  
Sci. Rep. RITU, A42, (1996), 403-405.
226. Water-Cooled Magnet for a 40T Compact Hybrid Magnet.  
S. Miura, K. Watanabe, S. Awaji, M. Motokawa, N. Kobayashi and T. Fukase  
Sci. Rep. RITU, A42, (1996), 407-410.
227. Anomalous Magnetization due to the Vortex Lattice Melting Transition in  $YBa_2Cu_3O_y$ .  
T. Nishizaki, Y. Onodera, T. Naito and N. Kobayashi  
J. Low Temp. Phys., 105, (1996), 1183-1188.
228. High-Field Resistivity along the c-Axis of Single Crystalline  $Bi_2Sr_2CaCu_2O_{8+\delta}$ .  
K. Kadowaki, T. Mochikyu, K. Hirata, H. Takeya, T. Nishizaki and N. Kobayashi  
Physica B, 216, (1996), 269-273.
229. Surface Acoustic Wave Investigations of  $Y_{1-x}Pr_xBa_2Cu_3O_y$  Films.  
M. Yoshizawa, K. Shiga, N. Yoshimoto, N. Oki, H. Iwasaki, S. Kenmochi and N. Kobayashi  
Physica B, 219,220, (1996), 179-181.
230. Lattice Thermal Conductivity of Nb-Based Alloy Superconductors and Phonon Scattering by Electrons.  
M. Ikebe, T. Naito, H. Fujishiro, K. Noto, N. Kobayashi and K. Mori  
Physica B, 219,220, (1996), 80-82.

231. Crossover from the First-Order Vortex Phase Transition to the Peak Effect in  $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_y$  Having Different Oxygen Contents.  
T. Hanaguri, T. Tsuboi, A. Maeda, T. Nishizaki, N. Kobayashi, Y. Kotaka, J. Shimoyama and K. Kishio  
*Physica C*, 256, (1996), 111-118.
232. Magnetization Hysteresis of Quench-Melt-Growth Processed  $\text{YBa}_2\text{Cu}_3\text{O}_7$  in High Fields up to 23 T.  
G. C. Han, S. Awaji, K. Watanabe, N. Kobayashi, K. Kimura and M. Hashimoto  
*Physica C*, 262, (1996), 292-296.
233. AgI-Intercalation into  $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_z$  Compound.  
Y. Muraoka, N. Ohnishi, M. Nagoshi, Y. Morioka, M. Kikuchi, K. Hiraga, N. Kobayashi and Y. Syono  
*Physica C*, 263, (1996), 193-196.
234. Dimensionality,  $T_c$  and Cu-Site Substitution Effect of Iodine-Intercalated and Oxidized  $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$  : Interpretation by the Multilayer Model.  
Y. Koike, A. Fujiwara, T. Kluge, T. Noji, T. Nishizaki, N. Kobayashi, A. Yamanaka, F. Minami and S. Takekawa  
*Physica C*, 263, (1996), 329-332.
235. Magnetization Jump due to the First-Order Vortex Lattice Melting Transition in  $\text{YBa}_2\text{Cu}_3\text{O}_y$  Single Crystals.  
Y. Onodera, T. Nishizaki, H. Asaoka, H. Takei and N. Kobayashi  
*Physica C*, 263, (1996), 409-411.
236. Doping Level Dependence of Magnetization Anomalies and Heat Capacity of  $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$  in the Mixed State.  
T. Hanaguri, T. Tsuboi, A. Maeda, T. Nishizaki, N. Kobayashi, Y. Kotaka, J. Shimoyama and K. Kishio  
*Physica C*, 263, (1996), 434-437.
237. Irreversibility Line and Second Peak in the Magnetization Curves of  $\text{Pb}_2\text{Sr}_2\text{Y}_{1-x}\text{CaxCu}_3\text{O}_8$  Single Crystals.  
T. Noji, T. Takabayashi, T. Nishizaki, N. Kobayashi and Y. Koike  
*Physica C*, 263, (1996), 442-445.
238. Development of a 40 T Compact Hybrid Magnet.  
K. Watanabe, S. Awaji, N. Kobayashi, S. Miura, T. Fukase, M. Motokawa, M. Urata, K. Koyanagi, M. Tezuka and S. Hanai  
*IEEE Trans. Magn.*, 32, (1996), 2470-2473.

239. High Field Properties of Irreversibility Field and Pinning Force for  $\text{YBa}_2\text{Cu}_3\text{O}_7$  Film.  
S. Awaji, K. Watanabe, N. Kobayashi, H. Yamane and T. Hirai  
IEEE Trans. Magn., 32, (1996), 2776-2779.
240. Highly-Strengthened Alumina-Copper Alloy Matrix  $(\text{Nb}, \text{Ti})_3\text{Sn}$  Conductor Fabricated by Using the Tube Process.  
S. Murase, S. Nakayama, Y. Yamada, K. Shimamura, M. Tezuka, N. Shiga, K. Watanabe and N. Kobayashi  
IEEE Trans. Magn., 32, (1996), 2937-2940.
241. Magnetization and Flux Pinning in  $\text{YBa}_2\text{Cu}_3\text{O}_y$  Single Crystals.  
N. Kobayashi, T. Nishizaki, Y. Onodera, H. Asaoka and H. Takei  
Chinese J. Phys., 34, (1996), 514-521.
242. New Superconducting Phase in Potassium Amalgam Doped Fullerenes.  
N. Satoh, S. Tanuma, H. Takenaka, T. Nishizaki and N. Kobayashi  
Jpn. J. Appl. Phys., 35, (1996), 3392-3395.
243. Ettingshausen and Nernst Effects of  $\text{QMG-YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  in Magnetic Fields up to 14T.  
T. Sasaki, M. Sawamura, S. Awaji, K. Watanabe, N. Kobayashi, K. Kimura, K. Miyamoto and M. Hashimoto  
Jpn. J. Appl. Phys., 35, (1996), 82-89.
244. Superconducting and Mechanical Properties of Alumina-Copper Reinforced  $\text{Nb}_3\text{Sn}$  Wire Fabricated Using the Tube Process.  
S. Murase, S. Nakayama, T. Masegi, Y. Yamada, S. Nomura, K. Shimamura, K. Koyanagi, M. Urata, N. Shiga, K. Watanebe and N. Kobayashi  
Mater. Trans. JIM, 37, (1996), 514-518.
245. Ettingshausen and Nernst Effects in Mixed State of  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ .  
T. Sasaki, K. Watanabe and N. Kobayashi  
Sci. Rep. Res. Inst. Tohoku Univ. A, 42, (1996), 351-358.
246. Vortex-Lattice Melting Transition in  $\text{La}_{1.85}\text{Sr}_{0.15}\text{CuO}_4$  Single Crystal.  
T. Naito, T. Nishizaki, F. Matsuoka, H. Iwasaki and N. Kobayashi  
Czech. J. Phys., 46, (1996), 1585-1586.
247. Magnetic Phase Diagram and Vortex Pinning in  $\text{YBa}_2\text{Cu}_3\text{O}_y$  Single Crystals.  
T. Nishizaki, Y. Onodera, T. Naito, H. Asaoka, H. Takei and N. Kobayashi  
Czech. J. Phys., 46, (1996), 1595-1596.

248. Suppression of the Superconducting Transition Temperature  $T_c$  around  $x \sim 0.115$  in  $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ .  
M. Maki, M. Sera, M. Hiroi and N. Kobayashi  
Phys. Rev. B, 53, (1996), 11324-11327.
249. Magnetization Jump and the Vortex-Lattice Melting Transition in  $\text{YBa}_2\text{Cu}_3\text{O}_y$ .  
T.Nishizaki, Y.Onodera, N.Kobayashi, H.Asaoka and H.Takei  
Phys. Rev. B, 53, (1996), 82-85.
250. In-Plane and Out-of-Plane Magnetoresistance in  $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$  Single Crystals.  
T. Kimura, S. Miyasaka, H. Takagi, K. Tamasaku, H. Eisaki, S. Uchida,  
K. Kitazawa, M. Hiroi, M. Sera and N. Kobayashi  
Phys. Rev. B, 53, (1996), 8733-8742.
251. Thermal Conductivity of  $\text{RNi}_2\text{B}_2\text{C}$  ( $\text{R}=\text{Y}, \text{Ho}$ ) Single Crystals.  
M. Sera, S. Kobayashi, M. Hiroi, N. Kobayashi, H. Takeya, and K. Kadowaki  
Phys. Rev. B, 54, (1996), 3062-3065.
252. Thermal Conductivity of  $\text{RB}_6$  ( $\text{R}=\text{Ce}, \text{Pr}, \text{Nd}, \text{Sm}, \text{Gd}$ ) Single Crystals.  
M. Sera, S. Kobayashi, M. Hiroi, N. Kobayashi and S. Kunii  
Phys. Rev. B, 54, (1996), R5207-R5210.
253. Fourfold Symmetry in the  $ab$  Plane of the Upper Critical Field for Single-Crystal  $\text{Pb}_2\text{Sr}_2\text{Y}_{0.62}\text{Ca}_{0.38}\text{Cu}_3\text{O}_8$  : Evidence for  $d_{x^2-y^2}$  Pairing in a High- $T_c$  Superconductor. Y. Koike, T. Takabayashi, T. Noji, T. Nshizaki and N. Kobayashi  
Phys. Rev. B, 54, (1996), R776-R779.
254. Anomalous Magnetization and Dimensional Crossover of the Vortex System in the Organic Superconductor  $\kappa$ -(BEDT-TTF) $_2\text{Cu}(\text{NCS})_2$ .  
T. Nishizaki, T. Sasaki, T. Fukase and N. Kobayashi  
Phys. Rev. B, 54, (1996), R3760-R3763.
255. Anisotropy in the Resistive Superconducting Transition under Magnetic Fields in Single Crystal  $\text{Pb}_2\text{Sr}_2\text{Ho}_{0.5}\text{Ca}_{0.5}\text{Cu}_3\text{O}_8$ .  
T. Noji, Y. Koike, H. Iwasaki, M. Kato, N. Kobayashi and Y. Sato  
J. Supercond., 9, (1996), 65-71.
256. New Vibrating Sample Magnetometer for 31T Hybrid Magnet.  
G. C. Han, S. Awaji, K. Watanabe and N. Kobayashi  
Proc. 8th Int. Symp. Superconductivity(ISS'95), (1996), 1237-1240.

257. Thickness Dependence of Pinning Properties in Sputtered  $\text{YBa}_2\text{Cu}_3\text{O}_y$  Thin Films.  
N. Kobayashi, T. Nishizaki, A. Kamimura, M. Isa, S. Awaji and K. Watanabe  
Critical Currents in Superconductors, (1996), 179-182.
258. Irreversibility Field and Flux Pinning for  $\text{YBa}_2\text{Cu}_3\text{O}_7$  Films.  
S. Awaji, K. Watanabe, N. Kobayashi, H. Yamane and T. Hirai  
Critical Currents in Superconductors, (1996), 183-186.
259. High Precision Magnetization and Heat Capacity Measurements of  $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_y$  Single Crystals in the Mixed State.  
T. Tsuboi, T. Hanaguri, A. Maeda, T. Nishizaki, N. Kobayashi, Y. Kotaka, J. Shimoyama and K. Kishio  
Proc. 8th Int. Symp. Superconductivity (ISS '95), (1996), 205-208.
260. Nernst Effect in  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  and  $\text{Bi}_{2.1}\text{Sr}_{1.8}\text{Ca}_1\text{Cu}_2\text{O}_{8+\delta}$ .  
T. Sasaki, K. Yamada, K. Watanabe N. Kobayashi, S. Watauchi and K. Kishio  
Proc. 8th Int. Symp. Superconductivity (ISS '95), (1996), 299-302.
261. High-Field Studies on Peak Effect of Quench-Melt-Growth Processed  $\text{YBa}_2\text{Cu}_3\text{O}_7$ .  
G. C. Han, K. Watanabe, S. Awaji, N. Kobayashi, M. Takeo, K. Kimura and M. Hashimoto  
Critical Currents in Superconductors, (1996), 353-356.
262. Vortex Motion by the Thermal Force in  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ .  
T. Sasaki, J. Ikeda, K. Yamada, T. Naito, K. Watanabe and N. Kobayashi  
Proc. 8th Int. Symp. Superconductivity (ISS '95), (1996), 493-496.
263. Superconducting Magnet System with  $\text{YBa}_2\text{Cu}_3\text{O}_7$  Current Leads in High Fields.  
K. Watanabe, S. Awaji, G. C. Han, N. Kobayashi, K. Kimura and M. Hashimoto  
Proc. 8th Int. Symp. Superconductivity (ISS '95), (1996), 921-924.
264. A Design of a Compact Superconducting Magnet for a 40 T Hybrid Magnet.  
K. Koyanagi, S. Nomura, M. Urata, M. Arata, Y. Sumiyoshi, K. Watanabe, S. Awaji, N. Kobayashi, T. Fukase and M. Motokawa  
IEEE Trans. Appl. Supercond., 7 ( 2 ), (1997), 431-434.
265. Nernst Effect in the Mixed State of  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  and  $\text{Bi}_{2.1}\text{Sr}_{1.8}\text{Ca}_1\text{Cu}_2\text{O}_{8+\delta}$ .  
T. Sasaki, K. Yamada, K. Watanabe, S. Awaji, K. Kishio and N. Kobayashi  
Physica C, 282-287, (1997), 2009-2010

266. Reentrant Peak Effect and Irreversibility Line in Untwinned Single Crystals of  $\text{YBa}_2\text{Cu}_3\text{O}_y$ .  
T. Nishizaki, T. Naito and N. Kobayashi  
*Physica C*, 282-287, (1997), 2117-2118.
267. Superconducting and Magnetic Properties of  $(\text{La}, \text{Ca})\text{MnO}_3/\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  Multilayer Films.  
M. Isa, T. Nishizaki, M. Fujiwara, T. Naito and N. Kobayashi  
*Physica C*, 282-287, (1997), 691-692.
268. Superconducting Anisotropy in the Y-Based System Substituted for the Y, Ba and Cu Sites.  
H. Iwasaki, S. Inaba, K. Sugioka, Y. Nozaki and N. Kobayashi  
*Physica C*, 290, (1997), 113-121.
269. Phase Transition in Vortex-State of Untwinned  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  Single Crystals at High Magnetic Fields up to 260 kOe.  
T. Naito, T. Nishizaki and N. Kobayashi  
*Physica C*, 293, (1997), 186-190.
270. Thermal Conductivity of the c-Axis Aligned  $(\text{Bi}, \text{Pb})_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_y$  in the Superconducting and Mixed States.  
M. Matsukawa, K. Iwasaki, K. Noto, T. Sasaki, N. Kobayashi, K. Yoshida, K. Zikihara and M. Ishihara  
*Cryogenics*, 37 (5), (1997), 255-262.
271. In-Plane and Out-of-Plane Thermal Conductivities of a Large Single Crystal of  $\text{NdBa}_2\text{Cu}_3\text{O}_{7-x}$  Prepared by the Top-Seeded Solution-Growth Method.  
M. Matsukawa, K. Iwasaki, H. Sato, K. Noto, X. Yao, Y. Siohara and N. Kobayashi  
*Mater. Trans.*, 38 (9), (1997), 745-748.
272. Thermal Conductivity of Single-Crystalline  $\text{CeRu}_2\text{Si}_2$ .  
M. Sera, S. Kobayashi, M. Hiroi, N. Kobayashi, H. Ohkuni and Y. Onuki  
*Phys. Rev. B*, 56, (1997), 13689-13692.
273. Unusual Antiferromagnetic State in the Dimerized Phase in  $\text{CuGe}_{1-x}\text{Si}_x\text{O}_3$  Studied by Lattice Distortion.  
M. Sera, K. Yamamoto, M. Hiroi, N. Kobayashi, O. Fujita, A. Ogiwara and J. Akimitsu  
*Phys. Rev. B*, 56, (1997), 14771-14775.

274. Thermal Conductivity of  $\text{La}_{2-x-y}\text{Nd}_y\text{Sr}_x\text{CuO}_4$ .  
M. Sera, M. Maki, M. Hiroi and N. Kobayashi  
J. Phys. Soc. Jpn., 66 (3), (1997), 765-777.
275. Thermal Conductivity of a Heavy Fermion Superconductor  $\text{UPd}_2\text{Al}_3$  Single Crystal.  
M. Hiroi, M. Sera, N. Kobayashi, Y. Haga, E. Yamamoto and Y. Onuki  
J. Phys. Soc. Jpn., 66 (6), (1997), 1595-1598.
276. Unusual Magnetic Phase Diagram of  $\text{Ce}_x\text{La}_{1-x}\text{B}_6$  ( $x=0.5, 0.75$ ) Studied by the Magnetoresistance.  
M. Hiroi, M. Sera, N. Kobayashi, and S. Kunii  
J. Phys. Soc. Jpn., 66 (6), (1997), 1762-1770.
277. Dimensional Crossover of Vortex State and Peak Effect in Magnetization in Organic Superconductors.  
T. Nishizaki, T. Sasaki, T. Fukase and N. Kobayashi  
Synth. Met., 85, (1997), 1497-1498.
278. Magnetisation and Instability in Melt-Textured  $\text{YBa}_2\text{Cu}_3\text{O}_7$  at Low Temperature and High Fields up to 23 T.  
G. C. Han, K. Watanabe, S. Awaji, N. Kobayashi and K. Kimura  
Physica C, C274 (1&2), (1997), 33-38.
279. Anisotropic Pseudogap in  $\text{CeNiSn}$  and  $\text{CeRhSb}$  Studied by a Thermal-Conductivity Measurement.  
M. Sera, N. Kobayashi, T. Yoshino, K. Kobayashi, T. Takabatake, G. Nakamoto and H. Fujii  
Phys. Rev. B, B55 (10), (1997), 6421-6428.
280. Unusual Antiferromagnetic State in Si-Doped  $\text{CuGeO}_3$  Single Crystals Studied by Specific-Heat Measurements in Magnetic Fields.  
M. Hiroi, T. Hamamoto, M. Sera, H. Nojiri, N. Kobayashi, M. Motokawa, O. Fujita, A. Ogiwara and J. Akimitsu  
Phys. Rev. B, B55 (10), (1997), R6125-R6128.
281. Competition between the Antiferro-Quadrupolar and Antiferro-Exchange Interactions in  $\text{Ce}_x\text{La}_{1-x}\text{B}_6$ .  
M. Hiroi, M. Sera, N. Kobayashi and S. Kunii  
Phys. Rev. B, B55 (13), (1997), 8339-8346.



282. 1.5 kA Melt Textured  $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$  Current Leads for High Temperature and High Field Applications.  
K. Watanabe, S. Awaji, N. Kobayashi, K. Kimura and M. Morita  
Proc. 9th Int. Symp. Superconductivity(ISS'96), (1997), 1421-1424.
283. Preparation and Magnetic Properties of Untwinned  $\text{YBa}_2\text{Cu}_3\text{O}_y$  Single Crystals.  
T. Naito, T. Nishizaki, Y. Watanabe, and N. Kobayashi  
Proc. 9th Int. Symp. Superconductivity(ISS'96), (1997), 601-604.
284. Magnetoresistance and High-Field Magnetization of  $\text{Ce}_{0.5}\text{La}_{0.5}\text{B}_6$  and  $\text{Ce}_{0.7}\text{La}_{0.3}\text{B}_6$  Single Crystals.  
M. Hiroi, M. Sera, T. Sakon, H. Nojiri, N. Kobayashi, M. Motokawa and S. Kunii  
J. Magn. Magn. Mater, 177-181, (1998), 429-430.
285. In-Plane Thermal Conductivity of a Large Single Crystal of  $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$  in the Mixed State.  
M. Matsukawa, K. Iwasaki, K. Noto, N. Kobayashi and Y. Shiohara  
J. Magn. Magn. Mater, 177-181, (1998), 529-530.
286. Electrical and Magnetic Properties of  $\text{La}_{1-x}\text{Ca}_x\text{MnO}_3$  and  $\text{Pr}_{1-x}\text{Ca}_x\text{MnO}_3$  Thin Films.  
N. Kobayashi, M. Isa, T. Nishizaki and M. Fujiwara  
J. Magn. Magn. Mater., 177-181, (1998), 875-876.
287. Superconducting and Normal State Properties of the  $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}/\text{Nd}_{0.67}\text{Sr}_{0.33}\text{MnO}_3$  Heterostructures.  
P. Przyslupski, T. Nishizaki and N. Kobayashi  
Proc. 10th Int. Symp. Superconductivity (ISS '97), 1997, (1998), 1045-1048.
288. Phase Diagram in the Vortex State in  $\text{YBa}_2\text{Cu}_3\text{O}_y$  Single Crystals.  
N. Kobayashi, T. Nishizaki, T. Naito, T. Sasaki, S. Awaji and K. Watanabe  
Proc. 10th Int. Symp. Superconductivity (ISS '97), 1997, (1998), 443-448.
289. Magnetic Phase Diagrams of  $\text{CuGe}_{1-x}\text{Si}_x\text{O}_3$  Studied by Specific Heat Measurements.  
M. Hiroi, T. Hamamoto, M. Sera, H. Nojiri, N. Kobayashi, M. Motokawa, O. Fujita, A. Ogiwara and J. Akimitsu  
Physica B, 246-247, (1998), 242-245.
290. Magnetization Measurement of  $\text{YBa}_2\text{Cu}_3\text{O}_y$  in High Magnetic Fields up to 30 T.  
N. Kobayashi, T. Nishizaki, T. Naito, S. Awaji and K. Watanabe  
Physica B, 246-247, (1998), 433-436.

291. X-Ray Diffraction Investigation in High Fields at Low Temperature for  $\text{Nd}_{0.5}\text{Sr}_{0.5}\text{MnO}_3$ .  
K. Watanabe, Y. Watanabe, S. Awaji, M. Fujiwara, N. Kobayashi and T. Hasebe  
Adv. Cryog. Eng. Mater., 44B, (1998), 747-752.
292. Drastic Change of the Magnetic Phase Diagram of  $\text{Ce}_x\text{La}_{1-x}\text{B}_6$  between  $x=0.75$  and 0.5.  
M. Hiroi, S. Kobayashi, M. Sera, N. Kobayashi and S. Kunii  
J. Phys. Soc. Jpn., 67 (1), (1998), 53-56.
293. Transport Properties of  $\text{NdB}_6$  Single Crystal under the Magnetic Fields up to 15 T.  
M. Sera, M. Hiroi, N. Kobayashi and S. Kunii  
J. Phys. Soc. Jpn., 67 (2), (1998), 629-635.
294. Reentrant Behavior and Strong Anisotropy of the Phase Boundary between Antiferro-Quadrupolar Ordered and Paramagnetic Phases in  $\text{Ce}_x\text{La}_{1-x}\text{B}_6$  in High Magnetic Fields.  
M. Hiroi, S. Kobayashi, M. Sera, N. Kobayashi and S. Kunii  
Phys. Rev. Lett., 81, (1998), 2510-2513.
295. Anomalous Magnetization and Field-Driven Disordering Transition of a Vortex Lattice in Untwinned  $\text{YBa}_2\text{Cu}_3\text{O}_y$ .  
T.Nishizaki, T.Naito and N.Kobayashi  
Phys. Rev. B, B58 (17), (1998), 11169-11172.
296. Crossover from Intrinsic to Extrinsic Pinning for  $\text{YBa}_2\text{Cu}_3\text{O}_7$  Films.  
S. Awaji, K. Watanabe, and N. Kobayashi  
Cryogenics, 39, (1999), 569-577.
297. First Order Vortex Phase Transition in the Organic Superconductor  $\kappa$ -(BEDT-TTF) $_2\text{Cu}(\text{NCS})_2$ .  
M. Inaba, T. Sasaki, T. Nishizaki, N. Kobayashi, S. Yamada and T. Fukase  
J. Low Temp. Phys., 117, (1999), 1423-1427.
298. Antiferromagnetic Transition in  $\text{Sr}_{14-x}\text{Ca}_x\text{Cu}_{24}\text{O}_{41}$  Investigated by Specific Heat Measurements.  
M. Hiroi, M. Sera, N. Kobayashi, T. Nagata, H. Fujino and J. Akimitsu  
J. Low Temp. Phys., 117, (1999), 1677-1681.

299. Transport Anomalies in the Zn-Substituted  $\text{La}_{2-x}\text{Sr}_x\text{Cu}_{1-y}\text{Zn}_y\text{O}_4$  with  $x \sim 0.115$  ; Possibility of the Pinning of CDW and SDW by Zn.  
T. Adachi, T. Noji, H. Sato, Y. Koike, T. Nishizaki and N. Kobayashi  
J. Low Temp. Phys., 17, (1999), 1151-1155.
300. Transport and  $\mu$  SR Studies at  $p \sim 1/8$  in the Bi-2212 and Y-123 Phases.  
M. Akoshima, T. Noji, Y. Koike, T. Nishizaki, N. Kobayashi, I. Watanabe and K. Nagamine  
J. Low Temp. Phys, 17, (1999), 1163-1167.
301. Vortex Phase Diagram as a Function of Oxygen Deficiency in Untwinned  $\text{YBa}_2\text{Cu}_3\text{O}_y$ .  
T. Nishizaki, K. Shibata, T. Naito, M. Maki and N. Kobayashi  
J. Low Temp. Phys., 17, (1999), 1375-1379.
302. Effects of Iodine Intercalation on the Structural and Superconducting Properties of  $\text{Bi}_2\text{Sr}_{2-x}\text{Ln}_x\text{CuO}_z$  ( $\text{Ln}=\text{Nd}$  and  $\text{Sm}$ ) Compound.  
Y. Muraoka, M. Kikuchi, M. Hiroi, N. Kobayashi, K. Hiraga and Y. Syono  
Proc. 11th Int. Symp. Superconductivity (ISS '98), 1998, (1999), 431-434.
303. Electron Irradiation Effects on the Vortex Phase Diagram in Untwinned  $\text{YBa}_2\text{Cu}_3\text{O}_y$ .  
T. Nishizaki, T. Naito, S. Okayasu, A. Iwase and N. Kobayashi  
Proc. 11th Int. Symp. Superconductivity (ISS '98), 1998, (1999), 585-588.
304. Colossal Magnetoresistance and Superconductivity in  $\text{READmNO/YBCO}$  Heterostructures.  
P. Przysluski, T. Nishizaki, N. Kobayashi, S. Kolesnik, T. Skoskiewicz and E. Dynowska  
Physica B, 259-261, (1999), 820-821.
305. Magnetic Phase Diagram of  $\text{Ce}_{0.4}\text{La}_{0.6}\text{B}_6$  up to 15 T Investigated by Specific Heat Measurements.  
M. Hiroi, S. Kobayashi, M. Sera, N. Kobayashi and S. Kunii  
Physica B, 261, (1999), 34-35.
306. Magnetic Phase Diagram of Untwinned  $\text{YBa}_2\text{Cu}_3\text{O}_y$  Single Crystals Annealed in High Pressure Oxygen Atmosphere.  
K. Shibata, T. Nishizaki, T. Naito and N. Kobayashi  
Physica C, 317-318, (1999), 540-542.

307. In-Plane Thermal Conductivity of Single Crystals of Zn-Doped YBCO in the Mixed State.  
M. Matsukawa, H. Furusawa, K. Noto, X. Yao, Y. Shiohara and N. Kobayashi  
Physica C, 317-318, (1999), 600-602.
308. Effects of the Weak Disorder on the Vortex Phase Diagram and the Second Peak in Untwinned  $\text{YBa}_2\text{Cu}_3\text{O}_y$  Single Crystals.  
T. Nishizaki, T. Naito and N. Kobayashi.  
Physica C, 317-318, (1999), 645-647.
309. 1/8 Problems in the La-, Bi- and Y-Based Cuprates and New Anomalies in the Overdoped Region of the La-Based Cuprate.  
Y. Koike, M. Akoshima, T. Adachi, N. Kakinuma, T. Noji, Y. Ono, T. Nishizaki, N. Kobayashi, I. Watanabe and K. Nagamine  
Int. J. Mod. Phys., 31], (1999), 3546-3551.
310. The Nernst Effect in High-Tc Cuprate Superconductors.  
K. Yamafuji, T. Fujiyoshi, T. Kiss, M. Inoue, T. Sasaki and N. Kobayashi  
Physica C, 328, (1999), 230-241.
311. Antiferromagnetic Ordering in the Spin Singlet State of the Ladder/Chain Material :  $\text{Sr}_{2.5}\text{Ca}_{11.5}\text{Cu}_{24}\text{O}_{41}$ .  
T. Nagata, H. Fujino, J. Akimitsu, M. Nishi, K. Kakurai, S. Katano, K. Hiroi, M. Sera and N. Kobayashi  
J. Phys. Soc. Jpn., 68, (1999), 2206-2209.
312. Metamagnetic Transition in  $\text{NdB}_6$  with a Small Magnetic Anisotropy in Low Magnetic Fields.  
S. Awaji, N. Kobayashi, S. Sakatsume, S. Kunii and M. Sera  
J. Phys. Soc. Jpn., 68, (1999), 2518-2521.
313. Antiferro-Multipolar Short Range Order above the Antiferro-Quadrupolar Ordering Temperature in  $\text{CeB}_6$ .  
S. Kobayashi, M. Sera, M. Hiroi, N. Kobayashi and S. Kunii  
J. Phys. Soc. Jpn., 68, (1999), 3407-3412.
314. Vortex Phase Diagram of  $\text{YBa}_2\text{Cu}_3\text{O}_y$  in High Magnetic Fields - Effects of Weak Disorder.  
N. Kobayashi, T. Naito, T. Nishizaki, K. Shibata, S. Okayasu, A. Iwase and S. Sakatsume  
Proc. Physical Phenomena at High Magnetic Fields-III, (1999), 380-383.

315. Thermal Conductivity of (Nd,Eu,Gd)Ba<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub> Bulk Superconductors.  
K. Noto, T. Ito, A. Sugiyama, M. Murakami, M. Muralidhar, J. Yoshioka,  
T. Kikigawa-Sasaki and N. Kobayashi  
Cryogenic Engineering, (1999), 621-624.
316. Transport and  $\mu$  SR Studies at  $p \sim 1/8$  in the Bi-2212 and Y-123 Phases.  
M. Akoshima, T. Noji, Y. Koike, T. Nishizaki, N. Kobayashi, I. Watanabe and  
K. Nagamine  
J. Low. Temp. Phys., 117, (1999), 1163-1167.
317. Effects of Weak Point Disorder on the Vortex Matter Phase Diagram in  
Untwinned YBa<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub> Single Crystals.  
T. Nishizaki, T. Naito, S. Okayasu, A. Iwase and N. Kobayashi  
Phys. Rev. B, 61 (5), (2000), 3649-3654.
318. X-Ray Diffraction Study of the Structural Phase Transition of Ni<sub>2</sub>MnGa Alloys in  
High Magnetic Fields.  
Y. Ma, S. Awaji, K. Watanabe, M. Matsumoto and N. Kobayashi  
Solid State Commun., 113, (2000), 671-676.
319. Magnetic Ordering in Single Crystal CeNi<sub>0.82</sub>Cu<sub>0.18</sub>Sn.  
Y. Echizen, K. Umeo, S. Hamashima, T. Fujita, T. Takabatake, N. Kobayashi and I.  
Oguro  
Solid State Commun., 115, (2000), 587-591.
320. Vortex-Matter Phase Diagram in YBa<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub>.  
T. Nishizaki and N. Kobayashi  
Supercond. Sci. Technol., 13 (1), (2000), 1-11.
321. Transport Properties in Phase IV of Ce<sub>x</sub>La<sub>1-x</sub>B<sub>6</sub>.  
S. Kobayashi, M. Sera, M. Hiroi, N. Kobayashi and S. Kunii  
Physica B, 281, (2000), 557-558.
322. Study on CuGe<sub>0.9885</sub>Si<sub>0.0115</sub>O<sub>3</sub> in High Magnetic Fields by Specific Heat  
Measurements.  
M. Hiroi, M. Sera, N. Kobayashi and J. Akimitsu  
Physica B, 281&282, (2000), 669-670.
323. In-Plane Anisotropy of the Resistivity of LSCO Single Crystal in Magnetic Fields.  
H. Iwasaki, Y. Miyagawa, T. Suzuki, T. Naito and N. Kobayashi  
Physica B, 284-288, (2000), 1011-1012.

324. Superconducting Properties of Untwinned  $\text{YBa}_2\text{Cu}_3\text{O}_y$  Single Crystals Annealed in High-Pressure Oxygen.  
K. Shibata, T. Nishizaki, T. Naito, M. Maki and N. Kobayashi  
*Physica B*, 284-288 (Part1), (2000), 1027-1028.
325. Investigation of Phase Transformations in  $\text{Ni}_2\text{MnGa}$  Using High Magnetic Field Low-Temperature X-Ray Diffraction System.  
Y. Ma, S. Awaji, K. Watanabe, M. Matsumoto and N. Kobayashi  
*Physica B*, 284-288, (2000), 1333-1334.
326. Magnetic Phase Diagram of  $\text{CsCuCl}_3$  Studied by Specific Heat Measurements.  
M. Hiroi, M. Sera, H. Nojiri, N. Kobayashi, M. Motokawa and H. Tanaka  
*Physica B*, 284-288, (2000), 1605-1606.
327. Low Temperature and Magnetic Field X-Ray Diffraction Study for  $\text{Nd}_{0.5}\text{Sr}_{0.5}\text{MnO}_3$ .  
S. Awaji, K. Watanabe, M. Fujiwara, Y. Watanabe and N. Kobayashi  
*Physica B*, 284-288, (2000), 1682-1683.
328. Thermal Properties and Applications of High-Tc( $\text{Nd}$ ,  $\text{Eu}$ ,  $\text{Gd}$ ) $\text{Ba}_2\text{Cu}_3\text{O}_y$  Bulk Superconductors.  
K. Noto, T. Itoh, T. Abe, A. Sugiyama, M. Murakami, M. Muralidhar, J. Yoshioka, T. Kikegawa and N. Kobayashi  
*Physica C*, 335, (2000), 97-100.
329. Superconducting Fluctuation Probed by c-Axis Conductivity in  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  Single Crystal.  
T. Naito, H. Iwasaki, T. Nishizaki, K. Shibata and N. Kobayashi  
*Physica C*, 341-348, (2000), 1051-1052.
330. Anomalous Angular Dependence of Magnetization near  $H//ab$ -plane in  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  Single Crystal.  
T. Naito, H. Iwasaki, T. Nishizaki, K. Shibata and N. Kobayashi  
*Physica C*, 341-348, (2000), 1179-1180.
331. High-frequency Electromagnetic Response in the Mixed State of  $\text{YBa}_2\text{Cu}_3\text{O}_y$ .  
Y. Tsuchiya, K. Iwaya, T. Hanaguri, H. Kitano, A. Maeda, T. Nishizaki, K. Shibata and N. Kobayashi  
*Physica C*, 341-348, (2000), 1189-1190.

332. Ferromagnetism and Superconductivity in  $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3/\text{YBa}_2\text{Cu}_3\text{O}_7$  Superlattices.  
P. Przyslupski, I. Komissarov, E. Dynowska, S. Kolesnik, T. Skoskiewicz,  
J. Wosik, T. Nishizaki and N. Kobayashi  
*Physica C*, 341-348, (2000), 767-768.
333. New Equilibrium Phase Diagram of  $\text{YBa}_2\text{Cu}_3\text{O}_y$  under High Magnetic Fields.  
T. Nishizaki, K. Shibata, T. Sasaki and N. Kobayashi  
*Physica C*, 341-348, (2000), 957-960.
334. Intrinsic Josephson Effects in  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  Single Crystals with Various Oxygen Deficiencies.  
H. B. Wang, J. Chen, K. Nakajima, T. Yamashita, P. H. Wu, T. Nishizaki, K. Shibata and N. Kobayashi  
*Phys. Rev. B*, 61, (2000), R14948-R14951.
335. Transport Properties in Phase IV of  $\text{Ce}_x\text{La}_{1-x}\text{B}_6$ .  
S. Kobayashi, M. Sera, M. Hiroi, N. Kobayashi and S. Kunii  
*J. Phys. Soc. Jpn.*, 69 (3), (2000), 926-936.
336. Anomalous Lattice Distortion in Pr-Substituted Double-Layered Perovskite Manganite  $\text{La}_{1.2}\text{Sr}_{1.8}\text{Mn}_2\text{O}_7$  Single Crystals.  
H. Ogasawara, M. Matsukawa, S. Hatakeyama, M. Yoshizawa, M. Apostu, R. Suryanarayanan, G. Dahlenne, A. Revcolevchi, K. Itoh and N. Kobayashi  
*J. Phys. Soc. Jpn.*, 69 (5), (2000), 1274-1277.
337. Effect of High Magnetic Field on the Two-Step Martensitic-Phase Transition in  $\text{Ni}_2\text{MnGa}$ .  
Y. Ma, S. Awaji, K. Watanabe, M. Matsumoto and N. Kobayashi  
*Appl. Phys. Lett.*, 76, (2000), 37-39.
338. Vortex Phase Diagram in High-Tc Superconductor  $\text{YBa}_2\text{Cu}_3\text{O}_y$ .  
N. Kobayashi, T. Nishizaki, T. Naito, K. Shibata, M. Maki, S. Okayasu and A. Iwase  
*Proc. 3rd Superconductivity*, (2000), 43-50.
339. Critical Current Properties and Scaling of  $\text{Bi}(2223)/\text{Ag}$  Multifilamentary Tapes at Liquid Nitrogen Temperatures.  
K. Noto, T. Chiba, Y. Nagai, T. Saito, S. Awaji, K. Watanabe, N. Kobayashi and K. Yamafuji  
*Adv. Supercond.*, (2000), 670-672.

340. Current-Voltage Characteristics in the Density Wave State of  $\alpha$ -(BEDT-TTF)<sub>2</sub>KHg(SCN)<sub>4</sub>.  
T. Fujita, T. Sasaki, N. Yoneyama, N. Kobayashi and T. Fukase  
Synthetic Metals, 120, (2001), 1077-1078.
341. Local Magnetization Measurements of the Organic Superconductor  $\kappa$ -(BEDT-TTF)<sub>2</sub>Cu(NCS)<sub>2</sub>.  
N. Yoneyama, T. Sasaki, N. Kobayashi, N. Inada and S. Yamada  
Synthetic Metals, 120, (2001), 815-816.
342. J<sub>c</sub>-B Performance Study of an OCMG(Nd-Eu-Gd)-123 Material Doped by Sub-Micrometre Gd-211 Particles.  
M. Jirsa, M. Muralidhar, M. Murakami, K. Noto, T. Nishizaki and N. Kobayashi  
Supercond. Sci. Technol., 14, (2001), 50-57.
343. Giant Magnetostriction in Pr-Substituted Double-Layered Perovskite Magnetite La<sub>1.2</sub>Sr<sub>1.8</sub>Mn<sub>2</sub>O<sub>7</sub> Single Crystals.  
H. Ogasawara, M. Matsukawa, M. Yoshizawa, M. Apostu, R. Suryanarayanan, G. Dhalenne, A. Revcolevschi, K. Itoh and N. Kobayashi  
J Magn.Magn.Master., 226, (2001), 990-992.
344. Vortex Matter Phase Diagram of Untwinned YBa<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub> Single Crystals with Different Oxygen Content.  
K. Shibata, T. Nishizaki, T. Sasaki and N. Kobayashi  
Physica B, 294-295, (2001), 354-357.
345. Spin Injection in Perovskite YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7</sub>/La<sub>0.7</sub>Ca<sub>0.3</sub>MnO<sub>3</sub> Double Layers and YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7</sub>/SrTiO<sub>3</sub>/La<sub>0.7</sub>Ca<sub>0.3</sub>MnO<sub>3</sub> Trilayers in Magnetic Fields.  
J. Z. Liu, T. Nojima, T. Nishizaki and N. Kobayashi  
Physica C, 357, (2001), 1614-1617.
346. Vortex Phase Transition and Correlation in Partially Au-Ion Irradiated YBa<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub> Films.  
T. Nojima, J. Z. Liu, T. Nishizaki, S. Okayasu and N. Kobayashi  
Physica C, 357, (2001), 469-472.
347. Observation of Vortices in the High-Temperature Superconductor.  
S. Kanno, T. Kawai, S. Satou, K. Aizawa, M. Kusunoki, M. Mukaida, S. Ohsima, S. Hayashi, T. Nishizaki and N. Kobayashi  
Physica C, 357, (2001), 625-628.



348. Low-Temperature STM/STS of High- $T_c$  Superconductors.  
M. Maki, T. Nishizaki, K. Shibata, T. Sasaki and N. Kobayashi  
*Physica C*, 357-360, (2001), 291-293.
  
349. Melting Transition of Vortex Matter in  $\text{YBa}_2\text{Cu}_3\text{O}_y$  with Various Oxygen Contents.  
N. Kobayashi, T. Nishizaki, K. Shibata, T. Sato, M. Maki and T. Sasaki  
*Physica C*, 362, (2001), 121-126.
  
350. Dynamics vs Electronic States of Vortex Core of High- $T_c$  Superconductors Investigated by High-Frequency Impedance Measurement.  
A. Maeda, Y. Tsuchiya, K. Iwaya, K. Kinoshita, H. Kitano, T. Hanaguri, T. Nishizaki, K. Shibata, N. Kobayashi, J. Takeya, K. Nakamura and Y. Ando  
*Physica C*, 362, (2001), 127-133.
  
351. Estimation of Vortex Viscosity from the Complex Surface Impedance Measurement in the Mixed State of  $\text{YBa}_2\text{Cu}_3\text{O}_y$ .  
Y. Tsuchiya, K. Iwaya, K. Kinoshita, T. Hanaguri, H. Kitano, A. Maeda, T. Nishizaki, K. Shibata and N. Kobayashi  
*Physica C*, 362, (2001), 273-276.
  
352. In-Plane Anisotropy of the Resistivity in 60 K YBCO Single Crystal under Magnetic Field.  
T. Naito, S. Haraguchi, T. Suzuki, H. Iwasaki, T. Sasaki, T. Nishizaki, K. Shibata and N. Kobayashi  
*Physica C*, 362, (2001), 310-313.
  
353. Fourfold Symmetric Anisotropy in the  $\text{CuO}_2$  Planes of 60-K  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  Single Crystals.  
T. Naito, S. Haraguchi, H. Iwasaki, T. Sasaki, T. Nishizaki, K. Shibata and N. Kobayashi  
*Phys. Rev. B*, 63, (2001), 1725061-1725064.
  
354. Electronic State of Vortices in  $\text{YBa}_2\text{Cu}_3\text{O}_y$  Investigated by Complex Surface Impedance Measurements.  
Y. Tsuchiya, K. Iwaya, K. Kinoshita, T. Hanaguri, H. Kitano, A. Maeda, K. Shibata, T. Nishizaki and N. Kobayashi  
*Phys. Rev. B*, 63, (2001).

355. First-Order Field-Induced Transition, Magnetoresistance, and Giant Magnetostriction in Single Crystals of  $(\text{La}_{0.4}\text{Pr}_{0.6})_{1.2}\text{Sr}_{1.8}\text{Mn}_2\text{O}_7$ .  
M. Apostu, R. Suryanarayanan, A. Revcolevschi, H. Ogasawara, M. Matsukawa, M. Yoshizawa and N. Kobayashi  
Phys. Rev. B, 64, (2001).
356. Thermal Conductivity of the Two-Dimensional Spin-Gap System  $\text{SrCu}_2(\text{BO}_3)_2$  in Magnetic Fields.  
K. Kudo, T. Noji, Y. Koike and N. Kobayashi  
J. Phys.Soc. Jpn., 70, (2001), 1448-1451.
357. Anisotropic Magnetic Phase Diagram of  $\text{PrB}_6$  Dominated by the  $\text{O}_{xy}$  Antiferro-Quadrupolar Interaction.  
S. Kobayashi, M. Sera, M. Hiroi, T. Nishizaki, N. Kobayashi, and S. Kunii  
J. Phys. Soc. Jpn., 70, (2001), 1721-1730.
358. Identification of Atomic Layers of  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  by Scanning Tunneling Microscopy and Spectroscopy.  
M. Maki, T. Nishizaki, K. Shibata and N. Kobayashi  
J. Phys. Soc. Jpn., 70, (2001), 1877-1880.
359. Antiferromagnetic Ordering in the Spin Ladder Compound;  $\text{Sr}_{14-x}\text{Ca}_x\text{Cu}_{24}\text{O}_{41}$ .  
T. Nagata, H. Fujino, K. Satoh, N. Yamamori, J. Akimitsu, S. Katano, M. Nishi, K. Kakurai, M. Hirai, M. Sera, N. Kobayashi, K. Takeya, H. Amitsuka, T. Takigawa, H. Inago and T. Sakakibara  
J. Phys. Soc. Jpn., 70, (2001), 2419-2424.
360. Excess of Eu in the  $(\text{Nd}_{0.33}\text{Eu}_{0.33} + x\text{Gd}_{0.33-x})\text{Ba}_2\text{Cu}_3\text{O}_y$  System: the Way to a High Irreversibility Field at 77 K.  
M. Muralidhar, N. Sakai, Y. Wu, M. Murakami, M. Jirsa, T. Nishizaki, and N. Kobayashi  
Superconductor Science & Technology, 15, (2002), 1357-1363.
361. Observation of the Vortex Lattice Phase Transition in the Specific Heat in  $\text{La}_{1.86}\text{Sr}_{0.14}\text{CuO}_4$  Single Crystal.  
H. Iwasaki, T. Chigira, T. Naito, S. Moriyama, Y. Iwasa, T. Nishizaki, and N. Kobayashi  
Physica C-Superconductivity and Its Applications, 366, (2002), 129-134.
362. In-Plane Anisotropy of  $\text{Nd}_{1.86}\text{Ce}_{0.14}\text{CuO}_4$  Single Crystal in Magnetic Fields.  
S. Haraguchi, T. Naito, H. Iwasaki, T. Sasaki, and N. Kobayashi  
Physica C-Superconductivity and Its Applications, 378, (2002), 265-269.

363. Peculiarities of the Magnetic Phase Diagram in Small-Size Untwinned  $\text{YBa}_2\text{Cu}_3\text{O}_y$  Crystal Constructed by Highly Sensitive OFC-Magnetometer.  
S. G. Gevorgyan, T. Kiss, M. Inoue, A. A. Movsisyan, H. G. Shirinyan,  
T. Harayama, T. Matsushita, T. Nishizaki, N. Kobayashi, and M. Takeo  
*Physica C-Superconductivity and Its Applications*, 378, (2002), 531-536.
364. Effect of Zn Doping on the Electronic State of the Vortex Core in the Mixed State of  $\text{YBa}_2\text{Cu}_3\text{O}_y$ .  
K. Kinoshita, Y. Tsuchiya, T. Hanaguri, H. Kitano, A. Maeda, T. Nishizaki, T. Sato,  
and N. Kobayashi  
*Physica C-Superconductivity and Its Applications*, 378, (2002), 584-587.
365. Non-Universal Glass Scaling Behavior in Transport Properties of  $\text{YBa}_2\text{Cu}_3\text{O}_y$  Films with Columnar Defects.  
T. Nojima, M. Katakura, S. Okayasu, and N. Kobayashi  
*Physica C-Superconductivity and Its Applications*, 378, (2002), 593-597.
366. Low-Temperature Scanning Tunneling Microscopy of  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ .  
M. Maki, T. Nishizaki, K. Shibata, and N. Kobayashi  
*Physica C-Superconductivity and Its Applications*, 378, (2002), 84-88.
367. Absence of In-Plane Fourfold Anisotropy in  $\text{Nd}_{2-x}\text{Ce}_x\text{CuO}_4$  Single Crystal.  
H. Iwasaki, S. Haraguchi, T. Suzuki, T. Naito, T. Sasaki, and N. Kobayashi  
*Physica C-Superconductivity and Its Applications*, 382, (2002), 283-290.
368. Vortex Phase Diagram of High- $T_c$  Superconductor  $\text{YBa}_2\text{Cu}_3\text{O}_y$  in High Magnetic Fields.  
N. Kobayashi, and T. Nishizaki  
*Advances in Materials Research [Materials Science in Static High Magnetic Fields]*, 4, (2002), 13-26.
369. Flux-Pinning Properties for CVD Processed  $\text{YBa}_2\text{Cu}_3\text{O}_7$  Films.  
S. Awaji, K. Watanabe, N. Kobayashi, and T. Hirai  
*Advances in Materials Research [Materials Science in Static High Magnetic Fields]*, 4, (2002), 41-53.
370. NMR Studies of Magnetic Superconductor  $\text{RuSr}_2\text{RECu}_2\text{O}_8$  (RE = Gd, Eu and Y).  
Y. Furukawa, S. Takada, K. Kumagai, T. Kawashima, E. Takayama-Muromachi,  
N. Kobayashi, T. Fukase, K. Chiba, and T. Goto  
*Journal of Physics and Chemistry of Solids*, 63, (2002), 2315-2318.

371. Specific Heat of  $\text{Nd}_{1-x}\text{Sr}_x\text{MnO}_3$  ( $x \sim 0.5$ ).  
T. Sasaki, E. Ozaki, T. Uozu, A. Tobo, K. Ohoyama, Y. Yamaguchi, and  
N. Kobayashi  
Journal of Physics and Chemistry of Solids, 63, (2002), 917-920.
  
372. Magnetic and Electronic Phase Diagram and Superconductivity in the Organic  
Superconductors  $\kappa\text{-(ET)}_2\text{X}$ .  
T. Sasaki, N. Yoneyama, A. Matsuyama, and N. Kobayashi  
Phys. Rev. B, 65, (2002), Art. No. 060505.
  
373. Electronic Structure of the  $\text{CuO}$ -chain Layer in  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  Studied by  
Scanning Tunneling Microscopy.  
M. Maki, T. Nishizaki, K. Shibata, and N. Kobayashi  
Phys. Rev. B, 65, (2002), Art. No. 140511.
  
374. Phase Transition in the Vortex Liquid and the Critical Endpoint in  $\text{YBa}_2\text{Cu}_3\text{O}_y$ .  
K. Shibata, T. Nishizaki, T. Sasaki, and N. Kobayashi  
Phys. Rev. B, 66, (2002), Art. No. 214518.
  
375. Low-Temperature Vortex Liquid States Induced by Quantum Fluctuations in the  
Quasi-Two-Dimensional Organic Superconductor  $\kappa\text{-(BEDT-TTF)}_2\text{Cu(NCS)}_2$ .  
T. Sasaki, T. Fukuda, T. Nishizaki, T. Fujita, N. Yoneyama, N. Kobayashi, and  
W. Biberacher  
Phys. Rev. B, 66, (2002), Art. No. 224513.
  
376. Anomalous Lattice Distortion in Pr-Substituted Double-Layered Perovskite  
Manganite  $\text{La}_{1.2}\text{Sr}_{1.8}\text{Mn}_2\text{O}_7$  Single Crystals: II.  
M. Matsukawa, H. Ogasawara, T. Sasaki, M. Yoshizawa, M. Apostu,  
R. Suryanarayanan, A. Revcolevschi, K. Itoh, and N. Kobayashi  
Journal of the Physical Society of Japan, 71, (2002), 1475-1480.
  
377. Weakly Expressed Effects in HTS Detected by a Flat Coil-Based TD Oscillator,  
Demonstrating its Wide Possibilities for High-resolution Detection.  
S. G. Gevorgyan, T. Kiss, H. G. Shirinyan, A. A. Movsisyan, V. S. Gevorgyan,  
M. Inoue, T. Harayama, T. Matsushita, T. Nishizaki, N. Kobayashi, and M. Takeo  
Low Temperature Detectors (9th International Workshop on Low Temperature  
Detectors, AIP Conf. Proceedings Vol.605), (American Inst. Phys. 2002), (2002),  
123-126.

378. Antiferromagnetic Ordering in the One-Dimensional Edge-Sharing  $\text{CuO}_2$  Chain System  $\text{Ca}_2 + x\text{Y}_{2-x}\text{Cu}_5\text{O}_{10}$ .  
S. Kurogi, K. Kudo, T. Noji, Y. Koike, T. Nishizaki, and N. Kobayashi  
Journal of Low Temperature Physics, 131, (2003), 353-357.
379. Thermal Conductivity of the Four-Leg Spin-Ladder System  $\text{La}_2\text{Cu}_2\text{O}_5$  Single Crystal.  
K. Kudo, T. Noji, Y. Koike, T. Nishizaki, and N. Kobayashi  
Journal of Low Temperature Physics, 131, (2003), 725-729.
380. Disappearance of Bose-Glass Behavior in Transport Properties of  $\text{YBa}_2\text{Cu}_3\text{O}_y$  Films with Columnar Defects.  
T. Nojima, M. Katakura, S. Okayasu, S. Endo, and N. Kobayashi  
Journal of Low Temperature Physics, 131, (2003), 859-863.
381. Vortex Phase Diagram in Zn-Doped  $\text{YBa}_2\text{Cu}_3\text{O}_y$  Crystals.  
N. Kobayashi, T. Sato, T. Nishizaki, K. Shibata, M. Maki, and T. Sasaki  
Journal of Low Temperature Physics, 131, (2003), 925-929.
382. Vortex Phase Transition and Oxygen Vacancy in  $\text{YBa}_2\text{Cu}_3\text{O}_y$  Single Crystals.  
T. Nishizaki, K. Shibata, M. Maki, and N. Kobayashi  
Journal of Low Temperature Physics, 131, (2003), 931-940.
383. Effect of Impurities on the Electronic Structure of Vortex Core Investigated by Microwave Surface Impedance Measurement.  
A. Maeda, K. Kinoshita, Y. Inoue, H. Kitano, T. Nishizaki, T. Sato, K. Shibata, and N. Kobayashi  
Journal of Low Temperature Physics, 131, (2003), 969-973.
384. Threshold Electric Field of the Non-Linear Conductivity in the Density Wave Phase of  $\alpha$ -(BEDT-TTF) $_2\text{KHg}(\text{SCN})_4$ .  
T. Fujita, T. Sasaki, N. Yoneyama, N. Kobayashi, and T. Fukase  
Synthetic Metals, 133, (2003), 141-143.
385. First-Order Vortex Phase Transition in  $\kappa$ -Type BEDT-TTF Organic Superconductors.  
N. Yoneyama, A. Higashihara, T. Sasaki, N. Kobayashi, and S. Yamada  
Synthetic Metals, 133, (2003), 223-224.

386. Quantum Magnetic Oscillations in the Quantum Vortex Liquid State of  $\kappa$ -(BEDT-TTF)<sub>2</sub>Cu(NCS)<sub>2</sub>.  
T. Sasaki, T. Fukuda, T. Fujita, T. Nishizaki, N. Yoneyama, and N. Kobayashi  
Synthetic Metals, 137, (2003), 1187-1188.
387. Magnetic Phase Diagram and Superconductivity in  $\kappa$ -Type ET Salts.  
N. Yoneyama, T. Sasaki, and N. Kobayashi  
Synthetic Metals, 137, (2003), 1205-1206.
388. High Field and Low Temperature X-Ray Study on Phase Segregation for Nd<sub>0.5</sub>Sr<sub>0.5</sub>MnO<sub>3</sub> Powder and Single Crystal.  
S. Awaji, Y. Watanabe, T. Masaki, M. Fujiwara, T. Fukase, N. Kobayashi, and K. Watanabe  
Physica B, 329, (2003), 824-825.
389. Thermal Transport of Cr-Doped Double-Layered LaSr<sub>2</sub>Mn<sub>2</sub>O<sub>7</sub>.  
M. Matsukawa, E. Kikuchi, M. Yoshizawa, M. Apostu, R. Suryanarayanan, A. Revcolevschi, and N. Kobayashi  
Physica B, 329, (2003), 900-901.
390. Zn-Substitution Effect on the Thermal Conductivity of the Two-Dimensional Spin-Gap System SrCu<sub>2</sub>(BO<sub>3</sub>)<sub>2</sub> and the Two-Dimensional Antiferromagnetic System Cu<sub>3</sub>B<sub>2</sub>O<sub>6</sub> Single-Crystals.  
K. Kudo, T. Noji, Y. Koike, T. Nishizaki, and N. Kobayashi  
Physica B, 329, (2003), 910-911.
391. Quasiparticle Spectra and Their Spatial Variation on YBa<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub> by Scanning Tunneling Spectroscopy.  
K. Shibata, M. Maki, T. Nishizaki, and N. Kobayashi  
Physica C, 388, (2003), 277-278.
392. LT-STM Observation of YBa<sub>2</sub>(Cu<sub>1-x</sub>Znx)<sub>3</sub>O<sub>7- $\delta$</sub>  Single Crystals.  
M. Maki, T. Nishizaki, and N. Kobayashi  
Physica C, 388, (2003), 279-280.
393. Anomalous In-Plane Anisotropy of the Resistivity on Single Crystalline 60-K YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7- $\delta$</sub>  in High Magnetic Fields.  
T. Naito, S. Haraguchi, H. Iwasaki, T. Nishizaki, K. Shibata, and N. Kobayashi  
Physica C, 388, (2003), 333-334.

394. Temperature Dependence of the Hall Angle in Disordered  $Y_{1-x}Pr_xBa_2Cu_3O_{7-\delta}$  Thin Films.  
K. Makise, Y. Yadoguchi, F. Ichikawa, T. Fukami, T. Aomine, Z. Hao, B. Zhu, B. Xu, B. R. Zhao, T. Nishizaki, and N. Kobayashi  
Physica C, 388, (2003), 337-338.
395. Thermal Transport of  $Pr_2Ba_4Cu_7O_{15-y}$  Compound with Alternative Repetition of a Single-and Double Chain.  
H. Ogasawara, M. Matsukawa, S. Shirafuji, Y. Yamada, N. Kobayashi, and K. Itoh  
Physica C, 388, (2003), 357-358.
396. Four-Fold Symmetry of 90 K YBCO Single Crystals in Magnetic Fields.  
S. Haraguchi, Y. Kawabata, T. Naito, H. Iwasaki, T. Nishizaki, and N. Kobayashi  
Physica C, 388, (2003), 415-416.
397. Quantum Vortex Liquid State in the Quasi-Two-Dimensional Organic Superconductor  $\kappa$ -(BEDT-TTF) $_2$ Cu(NCS) $_2$ .  
T. Sasaki, T. Fukuda, T. Nishizaki, T. Fujita, N. Yoneyama, and N. Kobayashi  
Physica C, 388, (2003), 609-610.
398. Relaxation Study of RE-123 Materials with Different Types of Pinning Defects.  
M. Jirsa, V. Zablotskii, T. Nishizaki, N. Kobayashi, M. Muralidhar, and M. Murakami  
Physica C, 388, (2003), 683-684.
399. Vortex Glass Transition of the Josephson Vortex System in LSCO Crystals.  
H. Iwasaki, Y. Kawabata, T. Naito, Y. Fujita, S. Haraguchi, T. Sasaki, and N. Kobayashi  
Physica C, 388, (2003), 735-736.
400. Millimeter Wave and Microwave Electrodynamic Spectroscopy of  $YBa_2(Cu_{1-x}Zn_x)_3O_y$  in the Meissner and Mixed State.  
K. Kinoshita, Y. Inoue, T. Umetsu, H. Kitano, A. Maeda, T. Hanaguri, T. Nishizaki, T. Sato, K. Shibata, and N. Kobayashi  
Physica C, 388-389, (2003), 417-419.
401. Scanning Tunneling Spectroscopy Studies on Vortices in  $YBa_2Cu_3O_y$  Single Crystals.  
K. Shibata, M. Maki, T. Nishizaki, and N. Kobayashi  
Physica C, 392-396, (2003), 323-327.

402. Zn-Induced One-Dimensional Electronic Modulation in  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ .  
M. Maki, T. Nishizaki, and N. Kobayashi  
Phys. Rev. B, 67, (2003), Art. No. 014534.
  
403. Internal Magnetic Structure and Spin Dynamics in Transverse Field of the Molecular Nanomagnet  $\text{Mn}^{12}$ -Acetate Studied by  $^{55}\text{Mn}$  NMR.  
Y. Furukawa, K. Watanabe, K. Kumagai, F. Borsa, T. Sasaki, N. Kobayashi, and D. Gatteschi  
Phys. Rev. B, 67, (2003), Art. No. 064426.
  
404. Anisotropic Phonon Conduction and Lattice Distortions in Colossal-Magnetoresistance Bilayer Manganite  $(\text{La}_{1-z}\text{Pr}_z)_{1.2}\text{Sr}_{1.8}\text{Mn}_2\text{O}_7$  ( $z=0, 0.2, 0.4$ , and  $0.6$ ) Single Crystals.  
M. Matsukawa, M. Narita, T. Nishimura, M. Yoshizawa, M. Apostu, R. Suryanarayanan, A. Revcolevschi, K. Itoh, and N. Kobayashi  
Phys. Rev. B, 67, (2003), Art. No. 104433.
  
405. Shubnikov-De Haas Effect in the Quantum Vortex Liquid State of the Organic Superconductor  $\kappa$ -(BEDT-TTF) $_2\text{Cu}(\text{NCS})_2$ .  
T. Sasaki, T. Fukuda, N. Yoneyama, and N. Kobayashi  
Phys. Rev. B, 67, (2003), Art. No. 144521.
  
406. Vortex Slush Regime in the Josephson Vortex Phase Diagram of 60-K  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  Single Crystals.  
T. Naito, H. Iwasaki, T. Nishizaki, S. Haraguchi, Y. Kawabata, K. Shibata and N. Kobayashi  
Phys. Rev. B, 68, (2003), 224516(1-6).
  
407. Single-Crystal Growth and Thermal Conductivity of the Four-Leg Spin-Ladder System  $\text{La}_2\text{Cu}_2\text{O}_5$ .  
K. Kudo, T. Noji, Y. Koike, T. Nishizaki, and N. Kobayashi  
Journal of the Physical Society of Japan, 72, (2003), 2551-2555.
  
408. The Two-Phase Coexistent Region in  $\text{Nd}_{0.5}\text{Sr}_{0.5}\text{MnO}_3$ .  
Y. Watanabe, T. Masaki, S. Awaji, T. Kohki, T. Fukase, N. Kobayashi, and K. Watanabe  
Journal of Physical Society of Japan, 72, (2003), 2837-2842.



409. Anisotropic Magnetic Properties and Anomalous Thermal Conductivity in the bc Plane of the Quasi-Two-Dimensional Spin System  $\text{Cu}_3\text{B}_2\text{O}_6$ : Relation between the Thermal Conductivity and the Spin State in Magnetic Fields.  
K. Kudo, T. Noji, Y. Koike, T. Sakon, M. Motokawa, T. Nishizaki, and N. Kobayashi  
Journal of the Physical Society of Japan, 72, (2003), 569-575.
410. Relaxation in Bulk  $\text{RBa}_2\text{Cu}_3\text{O}_{7-\delta}$  Superconductors.  
M. Jirsa, T. Nishizaki, N. Kobayashi, M. Muralidhar and M. Murakami  
Phys. Rev. B, 70, (2004), 024525-1-024525-9.
411. Infrared Optical Conductivity and the Electronic Phase Diagram in the Organic Superconductor  $\kappa$ -(BEDT-TTF) $_2\text{X}$ .  
I. Ito, T. Sasaki, N. Yoneyama, N. Kobayashi, N. Hanasaki, H. Tajima, T. Ito and Y. Iwasa  
J. Phys. IV France, 114, (2004), 321-322.
412. Cooling Rate Dependence of the In-Plane Magnetic Penetration Depth in  $\kappa$ -Type BEDT-TTF Superconductors.  
N. Yoneyama, A. Higashihara, T. Sasaki, T. Nojima and N. Kobayashi  
J. Phys. IV France, 114, (2004), 401-402.
413. Thermal Conductivity in the Bose-Einstein Condensed State of  $\text{TiCuCl}_3$ .  
K. Kudo, M. Yamazaki, T. Kawamata, T. Noji, Y. Koike, N. Kobayashi and H. Tanaka  
J. Magn. Magn. Mat., 272-276, (2004), 214-215.
414. Magnon Thermal Conductivity in the Spin-Gap State and the Antiferromagnetically Ordered State of Low-Dimensional Copper Oxides.  
K. Kudo, Y. Koike, S. Kurogi, T. Noji, T. Nishizaki and N. Kobayashi  
J. Magn. Magn. Mat., 272-276, (2004), 94-95.
415. The Density Wave State Synchronized with the Quantum Oscillation in the Organic Conductor  $\alpha$ -(BEDT-TTF) $_2\text{KHg}(\text{SCN})_4$ .  
T. Fujita, T. Sasaki, N. Yoneyama and N. Kobayashi  
Physica B, 346-237, (2004), 363-367.
416. Vortex State in  $\text{YBa}_2\text{Cu}_3\text{O}_y$  Crystals: Vortex Phase Diagram and Tunneling Spectroscopy in Magnetic Field.  
N. Kobayashi, T. Nishizaki, T. Shibata and T. Sasaki  
Physica B, 346-347, (2004), 329-333.

417. Quantum Oscillations in the Vortex Liquid State of Organic Superconductor  $\kappa$ -(BEDT-TTF)<sub>2</sub>Cu(NCS)<sub>2</sub>.  
T. Sasaki, T. Fukuda, N. Yoneyama and N. Kobayashi  
Physica B, 346-347, (2004), 354-358.
418. Magnet Technology and Materials Research at the High-Field Laboratory for Superconducting Materials.  
K. Watanabe, S. Awaji, G. Nishijima, K. Takahashi, K. Koyama, M. Motokawa and N. Kobayashi  
Physica B, 346-347, (2004), 618-622.
419. Vortex Phase Transition under Tilted Magnetic Fields in 90-K YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7- $\delta$</sub>  Single Crystals.  
T. Naito, S. Haraguchi, H. Iwasaki, T. Nishizaki and N. Kobayashi  
Physica C, 412-414, (2004), 502-505.
420. Impurity Effect on the Electronic State of the Vortex Core in the Mixed State of YBa<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub>.  
K. Kinoshita, H. Kitano, A. Maeda, T. Nishizaki, M. Maeda, K. Shibata and N. Kobayashi  
Physica C, 412-414, (2004), 530-534.
421. Electronic Correlation in the Infrared Optical Properties of the Quasi-Two-Dimensional  $\kappa$ -Type BEDT-TTF Dimer System.  
T. Sasaki, I. Ito, N. Yoneyama, N. Kobayashi, N. Hanasaki, H. Tajima, T. Ito and Y. Iwasaki  
Phys. Rev. B, 69, (2004), 064508(1-7).
422. Field-Induced Magnetic Order in La<sub>2-x</sub>Sr<sub>x</sub>CuO<sub>4</sub> (x = 0.10, 0.115, 0.13) Studied by In-Plane Thermal Conductivity Measurements.  
K. Kudo, M. Yamazaki, T. Kawamata, T. Adachi, T. Noji, Y. Koike, T. Nishizaki and N. Kobayashi  
Phys. Rev. B, 70, (2004), 014503(1-8).
423. Anomalous Vortex Liquid-to-Glass Transition Line in Twinned YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7- $\delta$</sub> .  
T. Naito, H. Iwasaki, T. Nishizaki and N. Kobayashi  
Phys. Rev. B, 70, (2004), 014515(1-6).
424. Superconducting Properties under Magnetic Field in Na<sub>0.35</sub>CoO<sub>2</sub> · 1.3H<sub>2</sub>O Single Crystal.  
T. Sasaki, P. Badica, N. Yoneyama, K. Yamada, K. Togano and N. Kobayashi  
J. Phys. Soc. Jpn., 73, (2004), 1131-1134.

425. Impurity Effect on the In-Plane Penetration Depth of the Organic Superconductors  $\kappa$ -(BEDT-TTF)<sub>2</sub>X (X = Cu(NCS)<sub>2</sub> and Cu[N(CN)<sub>2</sub>]Br).  
N. Yoneyama, A. Higashihara, T. Sasaki, T. Nojima and N. Kobayashi  
J. Phys. Soc. Jpn., 73, (2004), 1290-1296.
426. Substitution Effect by Deuterated Donors on Superconductivity in  $\kappa$ -(BEDT-TTF)<sub>2</sub>Cu[N(CN)<sub>2</sub>]Br.  
N. Yoneyama, T. Sasaki, and N. Kobayashi  
J. Phys. Soc. Jpn., 73, (2004), 1434-1437.
427. Non-Linear Conduction in the Density Wave State of Quasi-Two Dimensional Organic Conductor  $\alpha$ -(BEDT-TTF)<sub>2</sub>KHg(SCN)<sub>4</sub>.  
T. Fujita, T. Sasaki, N. Yoneyama and N. Kobayashi  
J. Phys. Soc. Jpn., 73, (2004), 1525-1531.
428. Disorder Effect on the Vortex Pinning by the Cooling-Process Control in the Organic Superconductor  $\kappa$ -(BEDT-TTF)<sub>2</sub>Cu[N(CN)<sub>2</sub>]Br.  
N. Yoneyama, T. Sasaki, T. Nishizaki and N. Kobayashi  
J. Phys. Soc. Jpn., 73, (2004), 184-189.
429. Drastic Enhancement of Thermal Conductivity in the Bose-Einstein Condensed State of TlCuCl<sub>3</sub>.  
K. Kudo, M. Yamazaki, T. Kawamata, T. Noji, Y. Koike, T. Nishizaki, N. Kobayashi and H. Tanaka  
J. Phys. Soc. Jpn., 73, (2004), 2358-2361.
430. Imaging Phase Separation near the Mott Boundary of the Correlated Organic Superconductors  $\kappa$ -(BEDT-TTF)<sub>2</sub>X.  
T. Sasaki, N. Yoneyama, N. Kobayashi, Y. Ikemoto and H. Kimura  
Phys. Rev. Lett., 92, (2004), 227001(1-4).
431. Stretched Exponential Behavior in Remanent Lattice Striction of a (La,Pr)<sub>1.2</sub>Sr<sub>1.8</sub>Mn<sub>2</sub>O<sub>7</sub> Bilayer Manganite Single Crystal.  
M. Matsukawa, M. Chiba, A. Akasaka, R. Suryanarayanan, M. Apostu, A. Revcolevschi, S. Nimori and N. Kobayashi  
Phys. Rev. B, 70, (2004), 132402(1-4).
432. Multi-Triplet Magnons in SrCu<sub>2</sub>(BO<sub>3</sub>)<sub>2</sub> Studies by Thermal Conductivity Measurements in Magnetic Fields.  
K. Kudo, T. Noji, T. Nishizaki, and N. Kobayashi  
J. Phys. Soc. Jpn., 73, (2004), 3497-3498.

433. Field-Induced and Impurity-Induced Magnetic Order in  $\text{La}_{2-x}\text{S}_x\text{CuO}_4$  Studied by the Thermal Conductivity and  $\mu$  SR.  
Y. Koike, M. Yamazaki, T. Kawamata, N. Takahashi, N. Oki, S. Yairi, T. Adachi, T. Noji, K. Kudo, T. Nishizaki, N. Kobayashi, I. Watanabe, and K. Nagamine  
*Int. J. Modern Phys. B*, 19, (2005), 181-184.
434. Single-Crystal Growth and the Dependence on Hole Concentration and Magnetic Field of the Magnetic Ground State in the Edge-Sharing  $\text{CuO}_2$  Chain System  $\text{Ca}_{2+x}\text{Y}_{2-x}\text{Cu}_5\text{O}_{10}$ .  
K. Kudo, S. Kurogi, Y. Koike, T. Nishizaki and N. Kobayashi  
*Phys. Rev. B*, 71, (2005), 104413(1-10).
435. Magnetic-Field Effects on the In-Plane Electrical Resistivity in Single-Crystal  $\text{La}_{2-x}\text{Ba}_x\text{CuO}_4$  and  $\text{La}_{1.6-x}\text{Nd}_{0.4}\text{Sr}_x\text{CuO}_4$  around  $x = 1/8$ : Implication for the Field-Induced Stripe Order.  
T. Adachi, N. Kitajima, T. Manabe, Y. Koike, K. Kudo, T. Sasaki and N. Kobayashi  
*Phys. Rev. B*, 71, (2005), 104516(1-6).
436. Vortex Matter in  $\text{YBa}_2\text{Cu}_3\text{O}_y$  Single Crystals Investigated by Scanning Tunneling Spectroscopy. [*Phys. Rev. B*, 72, (2005), 014525(1-6).  
K. Shibata, T. Nishizaki, M. Maki and N. Kobayashi
437. Resistive Relaxation in the Field-Induced Insulator-Metal Transition of a  $(\text{La}_{0.4}\text{Pr}_{0.6})_{1.2}\text{Sr}_{1.8}\text{Mn}_2\text{O}_7$  Bilayer Manganite Single Crystal.  
M. Matsukawa, K. Akasaka, H. Noto, R. Suryanarayanan, S. Nimori, M. Apostu, A. Revcolevschi, and N. Kobayashi  
*Phys. Rev. B*, 72, (2005), 064412(1-5).
438. Real Space Imaging of the Metal-Insulator Phase Separation in the Band Width Controlled Organic Mott System  $\kappa$ -(BEDT-TTF) $_2\text{Cu}[\text{N}(\text{CN})_2]\text{Br}$ .  
T. Sasaki, N. Yoneyama, A. Suzuki, N. Kobayashi, Y. Ikemoto, and H. Kimura  
*J. Phys. Soc. Jpn.*, 74 (8), (2005), 2351-2360.
439. Layered Charge-Density Waves with Nanoscale Coherence in  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ .  
M. Maki, T. Nishizaki, K. Shibata and N. Kobayashi  
*Phys. Rev. B*, 72, (2005), 024536(1-6).
440. Vortex Phase Diagram in Impurity Doped  $\text{YBa}_2\text{Cu}_3\text{O}_y$  Single Crystals.  
T. Nishizaki, M. Maeda, T. Sato, and N. Kobayashi  
*Physica C*, 426-431, (2005), 18-22.

441.  $\mu$  SR and Thermal Conductivity Studies on Inhomogeneity of the Impurity- and Field-Induced Magnetism and Superconductivity in High- $T_c$  Cuprates.  
Y. Koike, T. Adachi, N. Oki, Resdiana, M. Yamazaki, T. Kawamata, T. Noji,  
K. Kudo, N. Kobayashi, I. Watanabe, and K. Nagamine  
Physica C, 426-431, (2005), 189-195.
  
442. Hole-Doping and Magnetic-Field Effects on the Pseudogap in  
 $\text{Bi}_{1.74}\text{Pb}_{0.38}\text{Sr}_{1.88}\text{CuO}_{6+\delta}$  Studied by the Out-of-Plane Resistivity.  
K. Kudo, Y. Miyoshi, T. Sasaki, and N. Kobayashi  
Physica C, 426-431, (2005), 251-256.
  
443. Phase Transition of the Josephson Vortices in  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  Single Crystals with Various Oxygen Deficiencies.  
T. Naito, S. Haraguchi, H. Iwasaki, T. Nishizaki, and N. Kobayashi  
Physica C, 426-431, (2005), 46-50.
  
444. Field-Induced Magnetic Order and Thermal Conductivity in  
 $\text{La}_{1.87}\text{Sr}_{0.13}\text{Cu}_{1-y}\text{M}_y\text{O}_4$  ( $\text{M} = \text{Zn, Ni}$ ).  
T. Kawamata, M. Yamazaki, N. Takahashi, T. Adachi, T. Noji, Y. Koike, K. Kudo,  
and N. Kobayashi  
Physica C, 426-431, (2005), 469-472.
  
445. Phase Diagram for the First Peak in Torque Curves of  $\text{YBa}_2\text{Cu}_4\text{O}_8$  Crystals up to 15 T.  
T. Ishida, K. Katayama, K. Satoh, Y. Yoshida, S. Kawamata, T. Sasaki,  
N. Kobayashi, S. Adachi and T. Machi  
Physica C, 426-431, (2005), 69-73.
  
446. Superconductivity and Physical Properties of  $\text{Ba}_{24}\text{Si}_{100}$  Determined from Electric Transport, Specific-Heat Capacity, and Magnetic Susceptibility Measurements.  
T. Rachi, H. Yoshino, R. Kumashiro, M. Kitajima, K. Kobayashi, K. Yokogawa,  
K. Murata, N. Kimura, H. Aoki, H. Fukuoka, S. Yamanaka, H. Shimotani,  
T. Takenobu, Y. Iwasa, T. Sasaki, N. Kobayashi, Y. Miyazaki, K. Saito, F. Z. Guo,  
K. Kobayashi, K. Osaka, K. Kato, M. Takata, and K. Tanigaki  
Phys. Rev. B, 72, (2005), 144504(1-6).
  
447. Phase Separation in the Vicinity of the Surface of  $\kappa$ -(BEDT-TTF) $_2\text{Cu}[\text{N}(\text{CN})_2]$   
Br by Fast Cooling.  
N. Yoneyama, T. Sasaki, N. Kobayashi, Y. Ikemoto and H. Kimura  
Phys. Rev. B, 72, (2005), 214519(1-5).

448. Effect of Suppression of Local Distortion on the Magnetic, Electrical, and Thermal Transport Properties of the Cr-Substituted Bilayer Manganite  $\text{LaSr}_2\text{Mn}_2\text{O}_7$ .  
M. Matsukawa, M. Chiba, E. Kikuchi, R. Suryanarayanan, M. Apostu, S. Nimori, K. Sugimoto, and N. Kobayashi  
*Phys. Rev. B*, 72, (2005), 224422(1-8).
449. 63/65Cu-NMR Study of the Quantum Spin System  $\text{NH}_4\text{CuCl}_3$  Showing Magnetization Plateaus.  
H. Inoue, T. Saito, S. Tani, S. Hosoya, A. Oosawa, T. Goto, M. Fujisawa, H. Tanaka, T. Sasaki, S. Awaji, K. Watanabe, and N. Kobayashi  
*J. Phys.: Conf. Series*, 51, (2006), 103-106.
450. Magnetic Field Effect on the Magnetic Torque and the Magnetostriction in  $(\text{CH}_3)_2\text{CHNH}_3\text{CuCl}_3$ .  
T. Suzuki, T. Saito, T. Sasaki, A. Oosawa, T. Goto, S. Awaji, K. Watanabe, N. Kobayashi, and H. Manaka  
*J. Phys.: Conf. Series*, 51, (2006), 187-190.
451. Cu-NMR Study on the Disordered Quantum Spin Magnet with the Bose-Glass Ground State.  
T. Fujiwara, H. Inoue, A. Oosawa, R. Tsunoda, T. Goto, T. Suzuki, Y. Shindo, H. Tanaka, T. Sasaki, N. Kobayashi, S. Awaji, and K. Watanabe  
*J. Phys.: Conf. Series*, 51, (2006), 199-202.
452. Magnetic-Field Effects on the Charge-Spin Stripe Order in La-214 High- $T_c$  Cuprates.  
T. Adachi, K. Omori, T. Kawamata, K. Kudo, T. Sasaki, N. Kobayashi, and Y. Koike  
*J. Phys.: Conf. Series*, 51, (2006), 259-262.
453. Vortex Phase Diagram in Untwinned  $\text{YBa}_2\text{Cu}_3\text{O}_y$  with Columnar Disorder.  
T. Nishizaki, K. Kasuga, Y. Takahashi, S. Okayasu, and N. Kobayashi  
*J. Phys.: Conf. Series*, 51, (2006), 267-270.
454. Pseudogap Closing Field of the Overdoped  $\text{Bi}_{1.79}\text{Pb}_{0.37}\text{Sr}_{1.86}\text{CuO}_{6+\delta}$  Investigated by the Out-of-Plane Resistivity in Pulsed Magnetic Fields up to 40 T.  
K. Kudo, T. Sasaki, E. Ohmichi, T. Osada, N. Okumura, T. Nishizaki, and N. Kobayashi  
*J. Phys.: Conf. Series*, 51, (2006), 291-294.

455. Disorder Effect on the Superconductivity of the Organic Superconductor  $\kappa$ -(BEDT-TTF)<sub>2</sub>Cu(NCS)<sub>2</sub> Partly Substituted by the Deuterated Molecules.  
H. Oizumi, T. Sasaki, N. Yoneyama, and N. Kobayashi  
J. Phys.: Conf. Series, 51, (2006), 323-326.
  
456. Cryocooled Superconducting Magnets for High Magnetic Fields at the HFLSM and Future Collaboration with the TML.  
K. Watanabe, G. Nishijima, S. Awaji, K. Koyama, K. Takahashi, N. Kobayashi, and T. Kiyoshi  
J. Phys.: Conf. Series, 51, (2006), 631-634.
  
457. Scanning Tunneling Microscopy and Spectroscopy Studies of Superconducting Boron-Doped Diamond Films.  
T. Nishizaki, Y. Takanob, M. Nagao, T. Takenouchi, H. Kawarada, and N. Kobayashi  
Sci. Tech. Adv. Mater, 7, (2006), S22-S26.
  
458. Scanning Tunneling Microscopy Study of the Anomalous Metallic Phases in  $\theta$ -(BEDT-TTF)<sub>2</sub>MZn(SCN)<sub>4</sub> (M=Rb, Cs).  
N. Yoneyama, T. Sasaki, T. Nishizaki, A. M. Troyanovskiy, and N. Kobayashi  
J. Low Temp. Phys., 142, (2006), 159-162.
  
459. Electrical Inhomogeneity at the Mott Transition in the Band Width Controlled  $\kappa$ -(BEDT-TTF)<sub>2</sub>CU[N(CN)<sub>2</sub>Br].  
T. Sasaki, N. Yoneyama, A. Suzuki, I. Ito, N. Kobayashi, Y. Ikemoto, H. Kimura, N. Hanasaki, and H. Tajima  
J. Low Temp. Phys., 142, (2006), 373-378.
  
460. STM/STS Studies on Vortex and Electronic State in YBa<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub>.  
T. Nishizaki, K. Shibata, M. Maki, and N. Kobayashi  
Physica C, 437-38, (2006), 220-225.
  
461. Specific Heat Capacity and Magnetic Susceptibility of Superconducting Ba<sub>24</sub>Si<sub>100</sub>.  
T. Rachi, K. Tanigaki, R. Kumashiro, K. Kobayashi, H. Yoshino, K. Murata, H. Fukuoka, S. Yamanaka, H. Shimotani, T. Takenobu, Y. Iwasa, T. Sasaki, N. Kobayashi, Y. Miyazaki, and K. Saito  
J. Phys. Chem. Solids., 67, (2006), 1334-1337.

462. In-Plane Thermal Conductivity of Large Single Crystals of Sm-Substituted  $(Y_{1-x}Sm_x)Ba_2Cu_3O_{7-\delta}$ .  
M. Matsukawa, H. Noto, A. Tamura, H. Furusawa, X. Yao, S. Nimori, N. Kobayashi, and Y. Shiohara  
Supercond. Sci. Technol., 19, (2006), 777-782.
  
463. Shadow Bands in Single-Layered  $Bi_2Sr_2CuO_{6+\delta}$  Studied by Angle-Resolved Photoemission Spectroscopy.  
K. Nakayama, T. Sato, T. Dobashi, K. Terashima, S. Souma, H. Matsui, T. Takahashi, J. C. Campuzano, K. Kudo, T. Sasaki, N. Kobayashi, T. Kondo, T. Takeuchi, K. Kadowaki, M. Kofu, and K. Hirota  
Phys. Rev. B, 74, (2006), 54505.
  
464. Performance of a Cryogen-Free 30 T-Class Hybrid Magnet.  
K. Watanabe, G. Nishijima, S. Awaji, K. Takahashi, K. Koyama, N. Kobayashi, M. Ishizuka, T. Itou, T. Tsurudome, and J. Sakuraba  
IEEE Trans. Appl. Supercond., 16, (2006), 934-939.
  
465. Evidence for Ballistic Thermal Conduction in the One-Dimensional Spin System  $Sr_2CuO_3$ .  
N. Takahashi, T. Kawamata, T. Adachi, T. Noji, Y. Koike, K. Kudo, and N. Kobayashi  
AIP Conf. Proc., 850, (2006), 1265-1266.
  
466. In-Plane Electrical Resistivity under Strong Magnetic Fields up to 27 T in  $La_{2-x}Ba_xCuO_4$  and  $La_{2-x}Sr_xCuO_4$  around  $x = 1/8$ .  
T. Adachi, T. Kawamata, Y. Koike, K. Kudo, T. Sasaki, and N. Kobayashi  
AIP Conf. Proc., 850, (2006), 429-430.
  
467. Field-Induced Magnetic Order and Thermal Conductivity in  $La_{2-x}Ba_xCuO_4$ .  
T. Kawamata, N. Takahashi, M. Yamazaki, T. Adachi, T. Manabe, T. Noji, Y. Koike, K. Kudo, and N. Kobayashi  
AIP Conf. Proc., 850, (2006), 431-432.
  
468. Pseudogap in Pb-doped Bi2201 Studied by the Out-of-Plane Resistivity in Magnetic Fields up to 40 T.  
K. Kudo, T. Sasaki, E. Ohmichi, T. Osada, Y. Miyoshi, and N. Kobayashi  
AIP Conf. Proc., 850, (2006), 505-506.



469. Dimensional Crossover in the Vortex System of Untwinned  $\text{YBa}_2\text{Cu}_3\text{O}_y$  Single Crystals with Highly Oxygen Deficiency.  
H. Fujita, T. Nishizaki, K. Kasuga, and N. Kobayashi  
AIP Conf. Proc., 850, (2006), 811-812.
470. In-Plane Anisotropy of the Vortex Motion in  $\text{YBa}_2\text{Cu}_3\text{O}_y$  Single Crystals.  
T. Nishizaki, H. Fujita, K. Kasuga, and N. Kobayashi  
AIP Conf. Proc., 850, (2006), 813-814.
471. Phase Transition from Superconducting to Normal State Induced by Spin Injection in Manganite/Cuprate/Au Double Tunnel Junctions.  
T. Nojima, T. Hyodo, S. Nakamura, and N. Kobayashi  
AIP Conf. Proc., 850, (2006), 885-886.
472. Two Kinds of Pseudogaps in  $\text{Bi}_{1.79}\text{Pb}_{0.37}\text{Sr}_{1.86}\text{CuO}_{6+\delta}$  Studied by the Out-of-Plane Resistivity in Magnetic Fields.  
K. Kudo, Y. Miyoshi, T. Sasaki, T. Nishizaki, and N. Kobayashi  
J. Phys. Soc. Jpn., 75, (2006), 124710(1-5).
473. Scanning Tunneling Microscopy/Spectroscopy on Superconducting Diamond Films.  
T. Nishizaki, Y. Takano, M. Nagao, T. Takenouchi, H. Kawarada, and N. Kobayashi  
New Diam. Front. Carbon Technol., 17, (2007), 21-31.
474. Anomalous Pressure Effect on the Remanent Lattice Striction of a  $(\text{La,Pr})_{1.2}\text{Sr}_{1.8}\text{Mn}_2\text{O}_7$  Bilayered Manganite Single Crystal.  
M. Matsukawa, A. Tamura, S. Nimori, R. Suryanarayanan, T. Kumagai, Y. Nakanishi, M. Apostu, A. Revcolevschi, K. Koyama, and N. Kobayashi  
Phys. Rev. B, 75, (2007), 14427.
475. Bulk and Surface Low-Energy Excitations in  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  Studied by High-Resolution Angle-Resolved Photoemission Spectroscopy.  
K. Nakayama, T. Sato, K. Terashima, H. Matsui, T. Takahashi, M. Kubota, K. Ono, T. Nishizaki, Y. Takahashi, and N. Kobayashi  
Phys. Rev. B, 75, (2007), 14513.
476. Steplike Lattice Deformation of Single Crystalline  $(\text{La}_{0.4}\text{Pr}_{0.6})_{1.2}\text{Sr}_{1.8}\text{Mn}_2\text{O}_7$  Bilayered Manganite.  
M. Matsukawa, Y. Yamato, T. Kumagai, A. Tamura, R. Suryanarayanan, S. Nimori, M. Apostu, A. Revcolevschi, K. Koyama, and N. Kobayashi  
Phys. Rev. Lett., 98, (2007), 267204.

477. STM Studies of Electronic Order in the Underdoped Surface of  $\text{YBa}_2\text{Cu}_3\text{O}_y$ .  
T. Nishizaki, N. Kobayashi, and M. Maki  
Int. J. Mod. Phys. B, 21, (2007), 3199-3201.
478. Hidden Order and Pseudogap of Pb-Substituted  $\text{Bi}2201$  Studied by Scanning Tunneling Microscopy and Out-of-Plane Resistivity in Magnetic Fields.  
K. Kudo, T. Nishizaki, N. Okumura, T. Sasaki, N. Kobayashi, E. Ohmichi, and T. Osada  
Int. J. Mod. Phys. B, 21, (2007), 3208-3210.
479. Vortex Phase Diagram of Underdoped  $\text{YBa}_2\text{Cu}_3\text{O}_y$  in Parallel Magnetic Fields.  
T. Nishizaki, Y. Takahashi, and N. Kobayashi  
Int. J. Mod. Phys. B, 21, (2007), 3364-3366.
480. NMR Study of the Vortex Slush Phase in Organic Superconductor  $\kappa\text{-(BEDT-TTF)}_2\text{Cu(NCS)}_2$ .  
M. Urano, J. Tonishi, H. Inoue, T. Saito, T. Fujiwara, H. Chiku, A. Oosawa, T. Goto, T. Suzuki, T. Sasaki, N. Kobayashi, S. Awaji, and K. Watanabe  
Phys. Rev. B, 76, (2007), 24505.
481. High-Field Magnetic Torque Measurement in the Spin Gap System  $(\text{CH}_3)_2\text{CHNH}_3\text{CuCl}_3$ .  
T. Saito, T. Sasaki, T. Suzuki, A. Oosawa, T. Goto, S. Awaji, K. Watanabe, and N. Kobayashi  
J. Phys. Soc. Jpn., 76, (2007), 84708.
482. In-Plane Anisotropy of the Resistivity in  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  Single Crystals with Various Doping Conditions.  
T. Naito, H. Iwasaki, T. Nishizaki, and N. Kobayashi  
Physica C, 460, (2007), 1196-1197.
483. Vortex Phase Diagram in Heavy Ion Irradiated Untwinned  $\text{YBa}_2\text{Cu}_3\text{O}_y$  Single Crystals.  
N. Kobayashi, T. Nishizaki, K. Kasuga, and S. Okayasu  
Physica C, 460, (2007), 1204-1205.
484. STM Studies on Structural Modulation and Two-Phase Microstructures in Pb-Doped  $\text{Bi}2201$  Single Crystals.  
T. Nishizaki, K. Kudo, N. Okumura, and N. Kobayashi  
Physica C, 460, (2007), 156-157.

485. Energy Gap and Surface Structure of Superconducting Diamond Films Probed by Scanning Tunneling Microscopy.  
T. Nishizaki, Y. Takano, M. Nagao, T. Takenouchi, H. Kawarada, and N. Kobayashi  
*Physica C*, 460, (2007), 210-211.
486. Vortex Phase Diagram near the Lower Critical Point in Untwinned  $\text{YBa}_2\text{Cu}_3\text{O}_y$  Single Crystals.  
T. Nishizaki, K. Shibata, and N. Kobayashi  
*Physica C*, 460, (2007), 281-284.
487. Origin of Shadow Bands in Single-Layered  $\text{Bi}_2\text{Sr}_2\text{CuO}_{6+\delta}$  Studied by High-Resolution Angle-Resolved Photoemission Spectroscopy.  
K. Nakayama, T. Sato, T. Dobashi, T. Takahashi, T. Kondo, T. Takeuchi, K. Kudo, and N. Kobayashi  
*Physica C*, 460, (2007), 931-933.
488. STM Studies on the Electronic State of the Overdoped  $\text{Bi}2201$ .  
K. Kudo, T. Nishizaki, N. Okumura, and N. Kobayashi  
*Physica C*, 460, (2007), 948-949.
489. Effect of Nonmagnetic Impurities on the Electronic State of Quasiparticles Confined in the Naturally Prepared Nanostructure under Magnetic Field in  $\text{YBa}_2\text{Cu}_3\text{O}_y$ .  
A. Maeda, H. Kitano, K. Kinoshita, T. Nishizaki, K. Shibata, and N. Kobayashi  
*J. Phys. Soc. Jpn.*, 76, (2007), 94708.
490. Dissipation of Quantized Vortex of High- $T_c$  Superconductors Investigated by Microwave Impedance: Novel Physics in Nano-Scale Space.  
A. Maeda, H. Kitano, H. Tsuchiya, K. Kinoshita, K. Shibata, T. Nishizaki, and N. Kobayashi  
*Physica C*, 463, (2007), 27-31.
491. STM Studies on the Hole Doping Dependence of the Hidden Order in Pb-Doped  $\text{Bi}2201$ .  
K. Kudo, T. Nishizaki, N. Okumura, and N. Kobayashi  
*Physica C*, 463, (2007), 40-43.
492. Origin of Shadow Bands in High- $T_c$  Cuprate Superconductors Studied by High-Resolution Angle-Resolved Photoemission Spectroscopy.  
K. Nakayama, T. Dobashi, T. Sato, T. Takahashi, T. Kondo, T. Takeuchi, K. Kudo, and N. Kobayashi  
*Physica C*, 463, (2007), 48-51.

493. X-ray Irradiation-Induced Carrier Doping Effects in Organic Dimer-Mott Insulators.  
T. Sasaki, H. Oizumi, N. Yoneyama, N. Kobayashi, and N. Toyota  
J. Phys. Soc. Jpn., 76, (2007), 123701.
494. Impurity Effect on Superconducting Properties in Molecular Substituted Organic Superconductor  $\kappa$ -(ET)<sub>2</sub>Cu(NCS)<sub>2</sub>.  
N. Yoneyama, T. Sasaki, H. Oizumi, and N. Kobayashi  
J. Phys. Soc. Jpn., 76, (2007), 123705.
495. High-Resolution Angle-Resolved Photoemission Study of Bulk Electronic States in YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7- $\delta$</sub> .  
K. Nakayama, T. Sato, T. Takahashi, T. Nishizaki, Y. Takahashi and N. Kobayashi  
Journal of Physics and Chemistry of Solids, 69 (12), (2008), 2967-2970.
496. One-Dimensional Electronic Order in Underdoped Surface of YBa<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub> Studied by STM.  
T. Nishizaki, M. Maki, and N. Kobayashi  
Journal of Physics and Chemistry of Solids, 69 (12), (2008), 3014-3017.
497. Low-Energy Electronic State of the Structural Modulation-Free Bi<sub>2</sub>Sr<sub>2</sub>CuO<sub>6+ $\delta$</sub>  Studied by the Scanning Tunneling Microscopy.  
K. Kudo, T. Nishizaki, N. Okumura, and N. Kobayashi  
Journal of Physics and Chemistry of Solids, 69 (12), (2008), 3022-3026.
498. Low-Temperature STM/STS Studies on Boron-Doped (111) Diamond Films.  
T. Nishizaki, Y. Takano, M. Nagao, T. Takenouchi, H. Kawarada, and N. Kobayashi  
Journal of Physics and Chemistry of Solids, 69 (12), (2008), 3027-3030.
499. Femtosecond Mid-IR Pump-Probe Spectroscopy of Photoinduced Insulator to Metal Transition in Dimer Mott Insulator  $\kappa$ -(BEDT-TTF)<sub>2</sub>X.  
Y. Kawakami, H. Nakaya, S. Iwai, N. Yoneyama, T. Sasaki, and N. Kobayashi  
Journal of Physics and Chemistry of Solids, 69 (12), (2008), 3085-3088.
500. Mott Transition and Superconductivity in the Strongly Correlated Organic Superconductor  $\kappa$ -(BEDT-TTF)<sub>2</sub>Cu[N(CN)<sub>2</sub>]Br.  
T. Sasaki, N. Yoneyama, and N. Kobayashi  
Phys. Rev. B, 77 (5), (2008), 054505.

501. Evidence for Ballistic Thermal Conduction in the One-Dimensional  $S=1/2$  Heisenberg Antiferromagnetic Spin System  $\text{Sr}_2\text{CuO}_3$ .  
T. Kawamata, N. Takahashi, T. Adachi, T. Noji, K. Kudo, N. Kobayashi, and Y. Koike  
*J. Phys. Soc. Jpn.*, 77 (3), (2008), 034607.
502. Phase Diagram of Interlayer Josephson Vortices in Underdoped  $\text{YBa}_2\text{Cu}_3\text{O}_y$ .  
T. Nishizaki, Y. Takahashi, and N. Kobayashi  
*Physica C*, 468, (2008), 664-668.
503. In-Plane Conduction and c-Axis Polarization in the Misfit-Layered Oxide  $[\text{Bi}_2\text{Ca}_2\text{O}_4]_q\text{CoO}_2$ .  
M. Maki, K. Machida, T. Mori, T. Nishizaki, and N. Kobayashi  
*Phys. Rev. B*, 78 (7), (2008), 73101.
504. Vortex State of Pb-Substituted  $\text{Bi}2201$  Studied by In-Plane Resistivity Measurements.  
D. Okamoto, K. Kudo, N. Okumura, T. Nishizaki, and N. Kobayashi  
*Physica C*, 468 (15-20), (2008), 1278-1280.
505. Effect of Pressure on the Steplike Magnetostriction of Single Crystalline Bilayered Manganite  $(\text{La}_{0.4}\text{Pr}_{0.6})_{1.2}\text{Sr}_{1.8}\text{Mn}_2\text{O}_7$ .  
Y. Yamato, M. Matsukawa, T. Kumagai, R. Suryanarayanan, S. Nimori, M. Apostu, A. Revcolevschi, K. Koyama, and N. Kobayashi  
*Phys. Rev. B*, 78 (13), (2008), 132411.
506. Optical Probe of Carrier Doping by X-Ray Irradiation in the Organic Dimer Mott Insulator  $\kappa\text{-(BEDT-TTF)}_2\text{Cu}[\text{N}(\text{CN})_2]\text{Cl}$ .  
T. Sasaki, N. Yoneyama, Y. Nakamura, N. Kobayashi, Y. Ikemoto, T. Moriwaki, and H. Kimura  
*Phys. Rev. Lett.*, 101 (20), (2008), 206403.
507. Effect of Magnetic Impurities on the Vortex Lattice Properties in  $\text{NbSe}_2$  Single Crystals.  
M. Iavarone, R. Di Capua, G. Karapetrov, A. E. Koshelev, D. Rosenmann, H. Claus, C. D. Malliakas, M. G. Kanatzidis, T. Nishizaki, and N. Kobayashi  
*Phys. Rev. B*, 78 (17), (2008), 174518.
508. Development of High-Field STM for 18 T Cryocooled Superconducting Magnet.  
T. Nishizaki, and N. Kobayashi  
*Journal of Physics: Conference Series*, 150, (2009), 012031.

509. Electronic Inhomogeneity in Pb-Substituted  $\text{Bi}_2\text{Sr}_2\text{CuO}_{6+\delta}$  Studied by STM/STS Measurements.  
K. Kudo, T. Nishizaki, N. Okumura, and N. Kobayashi  
Journal of Physics: Conference Series, 150, (2009), 052133.
  
510. Disorder Effect on Superconductivity in Organic Superconductor  $\kappa$ -(BEDT-TTF) $_2\text{Cu}(\text{NCS})_2$ .  
T. Sasaki, H. Oizumi, N. Yoneyama, and N. Kobayashi  
Journal of Physics: Conference Series, 150, (2009), 052224.
  
511. Competition between Mott Transition and Superconductivity under Magnetic Fields in Strongly Correlated Organic Superconductor  $\kappa$ -(BEDT-TTF) $_2\text{Cu}[\text{N}(\text{CN})_2]\text{Br}$ .  
T. Sasaki, N. Yoneyama, and N. Kobayashi  
Journal of Physics: Conference Series, 150, (2009), 052225.
  
512. Vortex Phase Diagram of Underdoped  $\text{YBa}_2\text{Cu}_3\text{O}_y$  Single Crystals in the Magnetic Field Parallel to the ab-Plane.  
Y. Tokita, T. Nishizaki, T. Sasaki, and N. Kobayashi  
Journal of Physics: Conference Series, 150, (2009), 052270.
  
513. Anomalous Upper Critical Field in Ternary Iron-Silicide Superconductor  $\text{Lu}_2\text{Fe}_3\text{Si}_5$ .  
Y. Nakajima, H. Hidaka, T. Tamegai, T. Nishizaki, T. Sasaki, and N. Kobayashi  
Physica C, 469, (2009), 921-923.
  
514. Evolution of a Pairing-Induced Pseudogap from the Superconducting Gap of  $(\text{Bi,Pb})_2\text{Sr}_2\text{CuO}_6$ .  
K. Nakayama, T. Sato, Y. Sekiba, K. Terashima, P. Richard, T. Takahashi, K. Kudo, N. Okumura, T. Sasaki, and N. Kobayashi  
Phys. Rev. Lett., 102 (22), (2009), 227006.
  
515. Thermal-Transport Measurements in a Quantum Spin-Liquid State of the Frustrated Triangular Magnet  $\kappa$ -(BEDT-TTF) $_2\text{Cu}_2(\text{CN})_3$ .  
M. Yamashita, N. Nakata, Y. Kasahara, T. Sasaki, N. Yoneyama, N. Kobayashi, S. Fujimoto, T. Shibauchi, and Y. Matsuda  
Nature Physics, 5 (1), (2009), 44-47.

516. Colossal Electroresistance and Colossal Magnetoresistive Step in Paramagnetic Insulating Phase of Single Crystalline Bilayered Manganite  
 $(\text{La}_{0.4}\text{Pr}_{0.6})_{1.2}\text{Sr}_{1.8}\text{Mn}_2\text{O}_7$ .  
 Y. Yamato, M. Matsukawa, Y. Murano, R. Suryanarayanan, S. Nimori, M. Apostu, A. Revcolevschi, K. Koyama, and N. Kobayashi  
 Applied Physics Letters, 94 (9), (2009), 092507.
  
517. Possible Phase Transition Deep Inside the Hidden Order Phase of Ultraclean  $\text{URu}_2\text{Si}_2$ .  
 H. Shishido, K. Hashimoto, T. Shibauchi, T. Sasaki, H. Oizumi, N. Kobayashi, T. Takamasu, K. Takehana, Y. Imanaka, T. D. Matsuda, Y. Haga, Y. Onuki, and Y. Matsuda  
 Phys. Rev. Lett., 102 (15), (2009), 156403.
  
518. Doping Dependence of the Gap Anisotropy of the High-Temperature  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  Superconductor.  
 K. Nakayama, T. Sato, K. Terashima, T. Arakane, T. Takahashi, M. Kubota, K. Ono, T. Nishizaki, Y. Takahashi, and N. Kobayashi  
 Phys. Rev. B, 79 (14), (2009), 140503.
  
519. Metallic Pattern Fabrication in Organic Mott Insulating Crystal by Local X-Ray Irradiation.  
 N. Yoneyama, T. Sasaki, N. Kobayashi, Y. Ikemoto, T. Moriwaki, and H. Kimura  
 Solid State Communications, 149 (19-20), (2009), 775-777.
  
520.  $^{63/65}\text{Cu}$ - and  $^{35/37}\text{Cl}$ -NMR Studies of Triplet Localization in the Quantum Spin System  $\text{NH}_4\text{CuCl}_3$ .  
 H. Inoue, S. Tani, S. Hosoya, K. Inokuchi, T. Fujiwara, T. Saito, T. Suzuki, A. Oosawa, T. Goto, M. Fujisawa, H. Tanaka, T. Sasaki, S. Awaji, K. Watanabe, and N. Kobayashi  
 Phys. Rev. B, 79 (17), (2009), 174418.
  
521. Optical Modulation of Effective On-Site Coulomb Energy for the Mott Transition in an Organic Dimer Insulator.  
 K. Kawakami, S. Iwai, T. Fukatsu, M. Miura, N. Yoneyama, T. Sasaki and N. Kobayashi  
 Phys. Rev. Lett., 103 (6), (2009), 066403.
  
522. Narrow Carrier Concentration Range of Superconductivity and Critical Point of Pseudogap Formation Temperature in Pb-Substituted  $\text{Bi}_2\text{Sr}_2\text{CuO}_{6+\delta}$ .  
 K. Kudo, N. Okumura, Y. Miyoshi, T. Nishizaki, T. Sasaki and N. Kobayashi  
 Journal of the Physical Society of Japan, 78 (8), (2009), 084722.

523. Effect of Pressure on Lattice Distortion, Transport and Magnetic Properties of Pr-Substituted  $\text{La}_{1.2}\text{Sr}_{1.8}\text{Mn}_2\text{O}_7$  Bilayered Manganite.  
Y. Yamato, M. Matsukawa, S. Nimori, R. Suryanarayanan, Y. Murano, Y. Nakanishi, M. Apostu, A. Revcolevschi, K. Koyama, and N. Kobayashi  
*J. Phys.: Condens. Matter*, 21 (48), (2009), 486001.
524. Phase Transition of Josephson Vortices Under High Magnetic Fields up to 30 T in Heavily Overdoped  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  Single Crystals.  
T. Naito, H. Iwasaki, T. Nishizaki, and N. Kobayashi  
*J. Low. Temp. Phys.*, 159, (2010), 168-171.
525. Local Spectroscopy and Vortex-Core Imaging on Chemically Wet-Etched Surfaces of  $\text{YBa}_2\text{Cu}_3\text{O}_y$  by Scanning Tunneling Microscopy/Spectroscopy.  
K. Shibata, T. Nishizaki, M. Maki, and N. Kobayashi  
*Supercond. Sci. Technol.*, 23, (2010), 085004(5pp).
526. Suppression of Superconductivity by X-Ray Irradiation Induced Disorders in Organic Superconductor  $\kappa$ -(BEDT-TTF) $_2\text{Cu}[\text{N}(\text{CN})_2]\text{Br}$ .  
K. Sano, T. Sasaki, N. Yoneyama, and N. Kobayashi  
*Physica B*, 405, (2010), S279-S281.
527. Magnetic Field Effect on Fe-Induced Short-Range Magnetic Correlation and Electrical Conductivity in  $\text{Bi}_{1.75}\text{Pb}_{0.35}\text{Sr}_{1.90}\text{Cu}_{0.91}\text{Fe}_{0.09}\text{O}_{6+y}$ .  
S. Wakimoto, H. Hiraka, K. Kudo, D. Okamoto, T. Nishizaki, K. Kakurai, T. Hong, A. Zheludev, J. M. Tranquada, N. Kobayashi, and K. Yamada  
*Phys. Rev. B*, 82, (2010), 064507.
528. The Local Effect of Magnetic Impurities on Superconductivity in  $\text{Co}_x\text{NbSe}_2$  and  $\text{Mn}_x\text{NbSe}_2$  Single Crystals.  
M. Iavarone, G. Karapetrov, J. Fedor, D. Rosenmann, T. Nishizaki, and N. Kobayashi  
*J. Phys.: Condens. Matter*, 22 (1), (2010), 015501.
529. X-Ray Irradiation Effect on Magnetic Properties of Dimer-Mott Insulators:  $\kappa$ -(BEDT-TTF) $_2\text{Cu}[\text{N}(\text{CN})_2]\text{Cl}$  and  $\beta$ '-(BEDT-TTF) $_2\text{ICl}_2$ .  
N. Yoneyama, T. Sasaki, N. Kobayashi, K. Furukawa, and T. Nakamura  
*Physica B*, 405 (11), (2010), S244-S246.
530. Electron Localization near the Mott Transition in the Organic Superconductor  $\kappa$ -(BEDT-TTF) $_2\text{Cu}[\text{N}(\text{CN})_2]\text{Br}$ .  
K. Sano, T. Sasaki, N. Yoneyama, and N. Kobayashi  
*Phys. Rev. Lett.*, 104, (2010), 217003.



531. Magnetic Properties of X-ray Irradiated Organic Mott Insulator  $\kappa$ -(BEDT-TTF)<sub>2</sub>Cu[N(CN)<sub>2</sub>Cl].  
N. Yoneyama, K. Furukawa, T. Nakamura, T. Sasaki, and N. Kobayashi  
Jornal of the Physical Society of Japan, 79 (6), (2010), 063706.
532. Anomalous Dielectric Response in the Dimer Mott Insulator  $\kappa$ -(BEDT-TTF)<sub>2</sub>Cu<sub>2</sub>(CN)<sub>3</sub>.  
M. Abdel-Jawad, I. Terasaki I, T. Sasaki, N. Yoneyama, N. Kobayashi, Y. Uesu, and C. Hotta  
Phys. Rev. B, 82 (12), (2010), 125119(1-5).
533. Ten Layered Hexagonal Perovskite Sr<sub>5</sub>Ru<sub>5-x</sub>O<sub>15</sub> (x=0.90), a Weak Ferromagnet with a Giant Coercive Field  $H_c \sim 12$  T.  
A. Yamamoto, D. Hashizume, H. A. Katori, T. Sasaki, T. E. Ohmichi, T. Nishizaki, N. Kobayashi, and H. Takagi  
Chem. Mat., 22 (20), (2010), 5712-5717.
534. Xenon-Plasma Light Ultrahigh-Resolution ARPES Study of Low-Energy Single-Particle Excitation Gap in (Bi,Pb)<sub>2</sub>Sr<sub>2</sub>CuO<sub>6</sub>.  
K. Nakayama, T. Sato, Y. Sekiba, K. Terashima, P. Richard, K. Kudo, N. Okumura, T. Sasaki, N. Kobayashi, and T. Takahashi  
Physica C, 470, (2010), S129-S131.
535. Pseudogap Phase Boundary in Overdoped Bi<sub>2</sub>Sr<sub>2</sub>CaCu<sub>2</sub>O<sub>8+ $\delta$</sub>  Studied by Measuring Out-of-Plane Resistivity under the Magnetic Fields.  
K. Murata, H. Kushibiki, T. Watanabe, K. Kudo, T. Nishizaki, N. Kobayashi, K. Yamada, T. Noji, and Y. Koike  
Physica C, 470, (2010), S153-S154.
536. STM/STS Studies on the Energy Gap of Pb-Substituted Bi<sub>2</sub>Sr<sub>2</sub>CuO<sub>6+ $\delta$</sub>  in Magnetic Fields.  
K. Kudo, T. Nishizaki, D. Okamoto, N. Okumura, and N. Kobayashi  
Physica C, 470, (2010), S195-S196.
537. Scanning Tunneling Microscopy/Spectroscopy in Iron-Pnictide Superconductor.  
T. Nishizaki, Y. Nakajima, T. Tamegai, and Kobayashi  
Physica C, 470, (2010), S342-S343.
538. Surface Structure and Superconductivity in Ba(Fe<sub>0.93</sub>Co<sub>0.07</sub>)<sub>2</sub>As<sub>2</sub> Probed by Scanning Tunneling Microscopy/Spectroscopy.  
T. Nishizaki, Y. Nakajima, T. Tamegai, and N. Kobayashi  
Journal of the Physical Society of Japan, 80, (2011), 014710.

539. Effect of Pressure on the Magnetic, Transport, and Thermal-Transport Properties of the Electron-Doped Manganite  $\text{CaMn}_{1-x}\text{Sb}_x\text{O}_3$ .

Y. Murano, M. Matsukawa, S. Ohuchi, S. Kobayashi, S. Nimori,  
R. Suryanarayanan, K. Koyama, and N. Kobayashi  
Phys. Rev. B, 83 (5), (2011), 054437.

### Ⅲ. 解説・評論

1. 遷移金属ダイカルコゲナイドの異常磁気抵抗.  
武藤芳雄, 小林典男  
日本物理学会誌, 35 (5), (1980), 420-425.
2. 熱緩和法による微量試料の熱容量測定法.  
小林典男, 能登宏七  
日本物理学会誌, 37 (11), (1982), 945-952.
3. Chevrel 相化合物の超伝導.  
武藤芳雄, 能登宏七, 小林典男  
固体物理 (金属物理セミナー), (1983), 51-62.
4. 磁束のピンニングと熱的クリープ.  
小林典男  
アグネ技術センター固体物理, 25 (10), (1990), 755-762.
5. 臨界磁場  $H_c$ .  
能登宏七, 小林典男, 渡辺和雄  
応用物理, 59 (5), (1990), 649-650.
6. 高  $J_c$ -YBCO 薄膜とピンニング機構.  
小林典男, 渡辺和雄, 山根久典  
表面科学, 12 (9), (1991), 17(553)-24(560).
7. 酸化物高温超伝導体の研究の展望.  
武藤芳雄, 小林典男  
低温工学, 27 (3), (1992), 13(195)-24(206).
8. 金属系超伝導体の基礎物性.  
小林典男  
国際超伝導産業技術研究センター ISTEC ジャーナル, 8 (1), (1995), 31-32.

9. Bi 系高温超伝導体の不可逆磁場 .  
小林典男  
固体物理 , 30, (1995), 469-476.
10. 溶融配向法で作製した  $\text{YBa}_2\text{Cu}_3\text{O}_x$  を用いた強磁場用電流リード .  
木村圭一, 森田充, 渡辺和雄, 淡路智, 小林典男  
低温工学 , 30, (1995), 577-582.
11. 混合状態の相図と磁束構造 .  
小林典男, 西寄照和  
まてりあ , 34 (12), (1995), 1358-1363.
12.  $\text{YBa}_2\text{Cu}_3\text{O}_7$  膜における固有ピンングから外的ピンングへのクロスオーバー .  
淡路智, 渡辺和雄, 小林典男  
低温工学 , 34 (6), (1999), 276-285.
13. 酸化物高温超伝導体  $\text{YBa}_2\text{Cu}_3\text{O}_y$  の渦糸相図 - 弱い乱れの効果 - .  
西寄照和, 小林典男  
日本物理学会誌 , 55 (10), (2000), 782-786.
14.  $\text{YBa}_2\text{Cu}_3\text{O}_y$  非双晶単結晶における渦糸体の物理 .  
西寄照和, 小林典男  
アグネ技術センター固体物理 , 38 (8), (2003), 515-527.